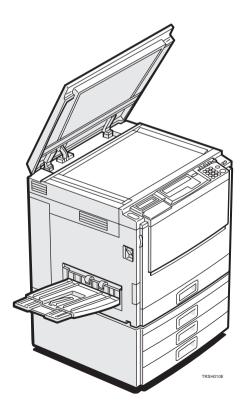


Aficio Color 3006

Operating Instructions



Read this manual carefully before you use this product and keep it handy for future reference.

For safety, please follow the instructions in this manual.

Introduction

This manual contains detailed instructions on the operation and maintenance of this machine. To get maximum versatility from this machine all operators should carefully read and follow the instructions in this manual. Please keep this manual in a handy place near the machine.

Please read the Safety Information before using this machine. It contains important information related to USER SAFETY and PREVENTING EQUIPMENT PROBLEMS.

Notes:

Some illustrations may be slightly different from your machine.

Certain options may not be available in some countries. For details, please contact your local dealer.

Operator Safety:

This machine is considered a CDRH class 1 laser device, safe for office/EDP use. The machine contains a 15-milliwat, 760-800 nanometer wavelength, GaAlAs laser diode. Direct (or indirect reflected) eye contact with the laser beam might cause serious eye damage. Safety precautions and interlock mechanisms have been designed to prevent any possible laser beam exposure to the operator.

Laser Safety:

The Center for Devices and Radiological Health (CDRH) prohibits the repair of laser-based optical unit in the field. The optical housing unit can only be repaired in a factory or at a location with the requisite equipment. The laser subsystem is replaceable in the field by a qualified Customer Engineer. The laser chassis is not repairable in the field. Customer engineers are therefore directed to return all chassis and laser subsystems to the factory or service depot when replacement or the optical subsystem is required.

Warning:

Use of controls or adjustment or perfomance of procedures other than those specified in this manual might result in hazardous radiation exposure.

Notes:

Two kinds of size notation are employed in this manual. With this machine refer to the inch version.

For good copy quality. Ricoh recommends that you use genuine Ricoh toner.

Ricoh shall not be responsible for any damage or expense that might result from the use of parts other than genuine Ricoh parts in your Ricoh office product.

Power Source

120V, 60Hz, 20A or more

Please be sure to connect the power cord to a power source as above. For details about power source, ***** see page 138.

Note to users in the United States of America
•
Notice:
This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and car radiate radio frequency energy and, if not installed and used in accordance with the instructions may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one more of the following measures:
Reorient or relocate the receiving antenna.
Increase the separation between the equipment and receiver.
Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
Consult the dealer or an experienced radio/TV technician for help.
•
Warning:
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
Note to users in Canada
Note:
This Class B digital apparatus complies with Canadian ICES-003.
Remarque concernant les utillisateurs au Canada Avertissement:
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.
In accordance with ISO Standard 7001, this machine uses the following symbols for the mair power switch:
means POWER ON.
U means STAND BY.

Do not make copies of anything which is prohibited from copying by law. The following items are normally prohibited from copying by national law. Other items may be prohibited by local law.

MoneyStampsBondsStocks

• Bank drafts • Checks • Passports • Driver's licenses

The copy samples in this Operating Instructions differ somewhat from actual copies due to printing effects.

The coloring of each Color key may differ somewhat from the actual copies.

This copier has a function that prevents making counterfeit bills. So, if you use an original image that is similar to a bill, you may not get proper copies.

Safety Information

When using your machine, the following safety precautions should always be followed.

Safety during Operation

In this manual, the following important symbols are used:

⚠ WARNING: Ignoring this warning could cause serious injury or even death.

⚠ CAUTION: Ignoring this caution could cause injury or damage to property.

Examples of Indications



Symbols \triangle mean a situation that requires you take care.



Symbols A mean "Hot surface".



Do NOT carry out the operation represented by this symbol \bigcirc . This example means "Do not take apart".



Symbols mean you MUST perform this operation.

This example means "You must remove the wall plug".

↑ WARNING:



- Only connect the machine to the power source described on the inside front cover of this manual.
- Avoid multi-wiring.
- Do not damage, break or make any modifications to the power cord. Do not place heavy objects on it, pull it hard or bend it more than necessary. These actions could cause an electric shock or fire.
- Do not plug or unplug the power cord with your hands wet. Otherwise, an electric shock might occur.



 Make sure the wall outlet is near the machine and freely accessible so that in event of an emergency it can be unplugged easily.



- Do not remove any covers or screws other than those specified in this manual. Some parts of the machine are at a high voltage and could give you an electric shock. Also, if the machine has laser systems, direct (or indirect) reflected eye contact with the laser beam may cause serious eye damage. When the machine needs to be checked, adjusted, or repaired, contact your service representative.
- Do not take apart or attempt any modifications to this machine. There is a risk of fire, electric shock, explosion or loss of sight. If the machine has laser systems, there is a risk of serious eye damage.



- If the machine looks damaged or breaks down, smoke is coming out, there is a strange smell or anything looks unusual, immediately turn off the operation and main power switches then unplug the power cord from the wall. Do not continue using the machine in this condition. Contact your service representative.
- If metal, liquid or foreigh matter falls into the machine, turn off the operation and main power switches, and unplug the main power cord. Contact your service representative. Do not keep using the machine with a fault or defect.



 Do not put any metal objects or containers holding water (e.g. vases, flowerpots, glasses) on the machine. If the contents fall inside the machine, a fire or electric shock could occur.



 Do not incinerate used toner or toner containers. Toner dust might ignite when exposed to an open flame. Dispose of the used toner containers according to local regulations for plastics.



 Do not insert your hands between sorter bins when your machine is equipped with the 20-bin sorter stapler. You may be injured.

↑ CAUTION:



- Keep the machine away from humidity and dust. A fire or an electric shock might occur.
- Do not place the machine on an unstable or tilted surface. If it topples over, it could cause injury.



After you move the machine, fix it with the caster fixture. Otherwise, the machine might move or come down to cause a personal injury.



- When you move the machine, unplug the power cord from the wall outlet to avoid fire or electric shock.
- When the machine will not be used for a long time, unplug the power cord.



When you pull out the plug from the socket, grip the plug to avoid damaging the cord and causing fire or electric shock.



• If you use the machine in a confined space, make sure there is a continuous air turnover.



• Do not reuse stapled paper. Do not use aluminum foil, carbon-containing paper or other conductive paper. Otherwise, a fire might occur.



 When removing misfed paper, do not touch the fusing section because it could be very hot.



 This machine has been tested for safety using this supplier's parts and consumables. We recommend you only use these specified supplies.



- Do not eat or swallow toner.
- Keep toner (used or unused) and toner containers out of reach of children.



 This equipment is only to be installed by a qualified service personnel.



Deliver to collection point for waste products. Do not be disposed of via domestic refuse collection.

How to Read this Manual

Symbols

In this manual, the following symbols are used:

↑ WARNING:

This symbol indicates a potentially hazardous situation that might result in death or serious injury when you misuse the machine without following the instructions under this symbol. Be sure to read the instructions, all of which are described in the Safety Information section.

↑ CAUTION:

This symbol indicates a potentially hazardous situation that might result in minor or moderate injury or property damage that does not involve personal injury when you misuse the machine without following the instructions under this symbol. Be sure to read the instructions, all of which are described in the Safety Information section.

*The statements above are notes for your safety.

Important

If this instruction is not followed, paper might be misfed, originals might be damaged, or data might be lost. Be sure to read this.

Preparation

This symbol indicates the prior knowledge or preparations required before operating.

Note

This symbol indicates precautions for operation, or actions to take after misoperation.

Limitation

This symbol indicates numerical limits, functions that cannot be used together, or conditions in which a particular function cannot be used.

Reference

This symbol indicates a reference.

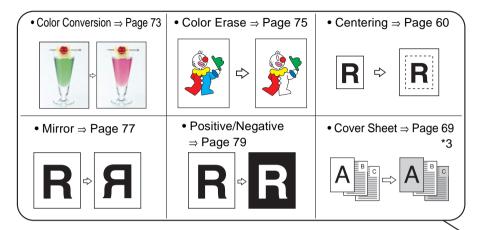
[]

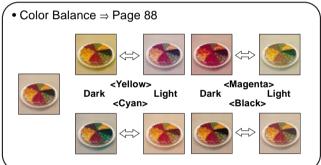
Keys that appear on the machine's panel display.

[]

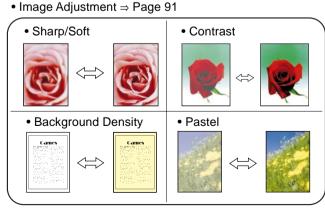
Keys built into the machine's operation panel.

What You Can do with this Machine





Bypass feed
 Copying ⇒ Page 36



- *1 The optional 20-bin sorter stapler, 10-bin sorter stapler or 3-bin sorter is required.
- *2 The optional 20-bin sorter stapler or 10-bin sorter stapler is required.
- *3 The optional document feeder is required.

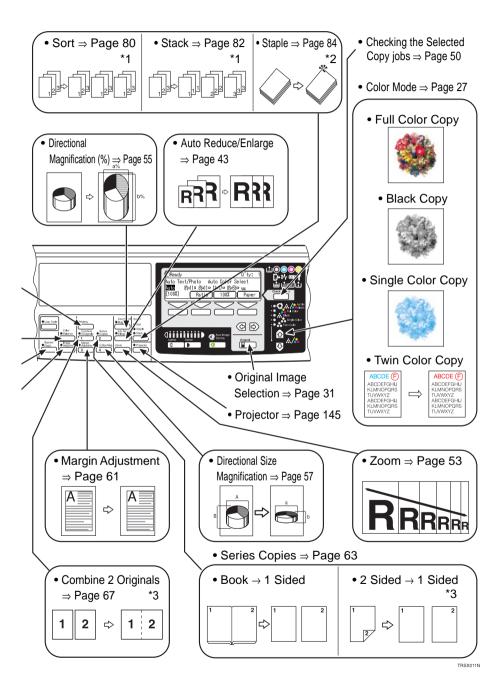


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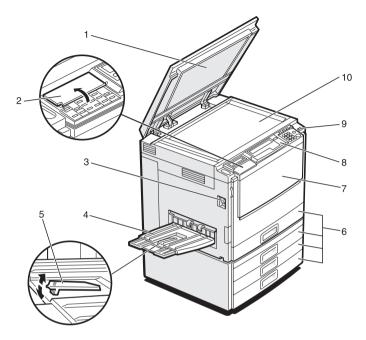
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Where it is & What it is

Machine Exterior



TRSH011E

1. Platen cover (option)

Lower this cover over originals placed on the exposure glass (platen grass) for copying.

2. Behind cover

Flip up when you use the keys underneath.

3. Main power switch

To start the machine, turn on this switch.



Note

☐ If the machine does not operate after turning on the operation switch, check if the main power switch is turned on. If it is off, turn it on.

4. Copy tray

Copied paper is delivered here.

5. Stopper

When you copy onto thin paper, raise this to prevent curling.

6. Paper tray

Set paper here. - See page 104.

7. Front cover

Open to access the inside of the machine.

8. Operation panel

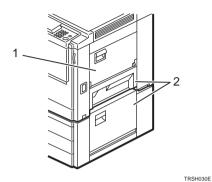
See page 6.

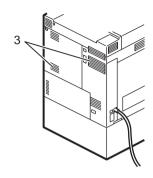
9. Operation switch

Press this switch to turn the power on (the On indicator lights up). To turn the power off, press this switch again (the On indica-

10. Exposure glass (platen glass)

Position originals here face down for copying.





TRSH020E

1. Bypass tray

Use to copy onto OHP transparencies, adhesive labels, translucent paper, post cards, and non-standard size paper, ✓ See page 36.

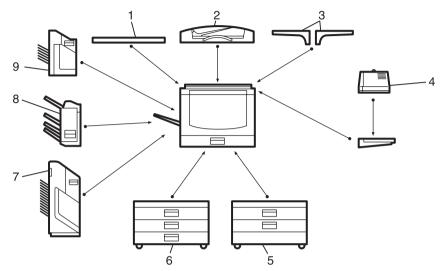
2. Right covers

- Open this cover to remove jammed paper.
- 3. Ventilation holes

Prevents overheating. Do not obstruct the ventilation hole by placing or leaning an object near it. If the machine overheats, a fault might occur.

Options

This machine can be provided with the following options:



TRSP010E

- 1. Platen cover
- 2. Document feeder (ADF)
- 3. Original tray
- 4. Film projector unit
- 5.1000-sheet tray unit (two 500-sheet trays)
- 6. 1500-sheet tray unit (three 500-sheet trays)
- 7. 20-bin sorter stapler
- 8. 3-bin sorter
- 9. 10-bin sorter stapler

Other options:

• Printer interface kit

Lower this cover over originals placed on the exposure glass (platen glass) for copying.

Insert a stack of originals here. They will be fed automatically.

Use to copy films. - See page 145.



☐ The holder is required for installation.

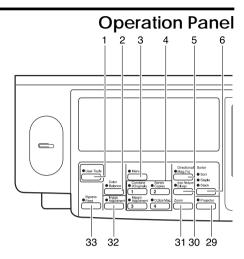
Consists of two paper trays.

Consists of three paper trays.

Sorts, stacks, and staples copies.

Sorts and stacks copies.

Sorts, stacks, and staples copies.



1. (User Tools) key

Press to change the default settings and conditions to meet your requirements.

2. [Color Balance] key

Press to adjust and store the color balance. • See page 88.

3. [Menu] key

Displays the names of available functions

4. (Favorite) keys

Press to use the stored functions you frequently use. As default, the following functions are stored:

- 1: Combine 2 Originals
- 2: Series Copies
- 3: Margin Adjustment
- 4: Directional Size Magnification (inch)

5. (Directional Mag.(%)) key

Press to use Directional Magnification (%) mode. • See page 55.

6. [Sorter] key

Press to select Sort, Stack or Staple mode. • See page 80.

7. Panel Display

Shows operation status, error messages, and function menus. • See page 8.

8. [Selection] keys

Press the key under the item you wish to select.

9. Indicators

These indicators show errors or the status of the machine. **See** page 100.

10. [Check Modes] key

Press to check all the settings you have set.

11. (Program) key

Press to select the program mode. See page 47.

12. [Clear Modes] key

Press to clear the previously entered settings.

13. (Energy Saver) key

Press to enter/exit Energy Saver mode.

See page 44.

14. (Interrupt) key

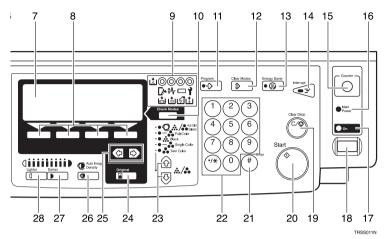
Press to make interrupt copies. • See page 45.

15. [Counter] key

Press to check the total number of copies made. See page 50.

16. Main Power indicator

This indicator lights up when the main power switch is turned on, and goes off when the switch is turned off.



17. On indicator

This indicator lights up when the operation switch is turned on, and goes off when the switch is turned off.

18. Operation switch

Press this switch to turn the power on (the **On** indicator lights up). To turn the power off, press this switch again (the **On** indicator goes off).

19. [Clear/Stop] key

Press to cancel the copy number entered. While copying, press to stop copying. This key is also used to clear data.

20. [Start] key

Press to start copying. Use to set the Auto Start.

21. [#] key

Use to enter data in selected modes.

22. (Number) keys

Use to enter the desired number of copies. They are also used to enter data.

23. 🛊 🛡 keys (Color Mode keys)

Press to select the color mode. See page 27.

24. (Original) key

Press to select original type you use.
See page 31.

25. **④** ▶ keys (Cursor keys)

Press to select an item on the panel display.

26. [Auto Image Density] key

Press to make copies in Auto Image Density mode. See page 25.

27. [Darker] key

Press to increase the image density. • See page 25.

28. [Lighter] key

Press to lower the image density. See page 25.

29. [Projector] key

Press to make copies with the projector unit. • See page 145.

30. [Auto Reduce/Enlarge] key

Enlarges or reduces the image automatically according to the specified paper size.
See page 43.

31. [Zoom] key

Enlarges or reduces in 1 % steps. ► See page 53.

32. [Image Adjustment] key

Press to change the default settings for image adjustment. • See page 91.

33. [Bypass Feed] key

Press to select the paper type when copying with the bypass tray. See page 36.

Panel Display

The panel display shows the status of the machine, error messages, and function menus.

Important

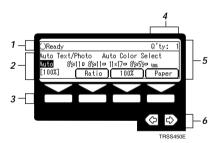
Do not apply a strong shock or force of about 30N (about 3kgf) or more to the panel display or you could damage it.

Note

- ☐ Currently selected items are shown highlighted on the panel display (e.g. Auto).
- ☐ Keys that are not available are shown grayed out (e.g. OK).

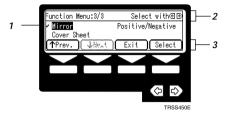
Layout and Keys

Initial display



- 1. The machine status and messages appear here.
- 2. Items which can be selected or specified.
- 3. These four keys correspond to the keys that are in the bottom line of the display (e.g. [Ratio], [100%], and [Paper] in the above display). Press the relevant key to select a key in the display.
- 4. Number of copies set.
- 5. Settings for this function.
- 6. Press these keys to select an item on the display.
 - \square To move the selection to the left, press the key.
 - \square To move the selection to the right, press the \triangleright key.

Function menu display



- 1. ✓ mark appears before the names of functions that are currently selected.
- 2. The machine status and messages appear here.
- 3. Items which can be selected or specified.

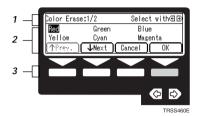
Common keys

[OK]	Confirm the selected function or value and return to the previous display.
[Can-	Cancel the selected function or value and return to the previous display.
[↑Prev.]	When there are too many items to fit on the display, use these keys to move between pages.
() NOXI	Press to highlight the selection desire.
[Exit]	Confirm the selected function or value and return to the initial display.
[Select]	Confirm the selected function.

Example Displays

The basic elements used on the display are shown below. Understanding their meaning help you exploit this machine's features quickly and easily.

Sample display for Color Erase



- 1. The machine status and messages appear here.
- 2. Available settings.
- 3. Screened key means to press it.
 - Delete Add Cancel OK

 TRSS450E
- ♣ Press the [OK] key.

- 1. Selected item.
- 2. Cancel the settings and returns to the previous display.
- 3. Confirm the settings and returns to the previous display.

Basics

Starting the Machine

To start the machine, press the operation switch to turn the power on.



☐ This machine automatically enters Energy Saver mode or turns itself off if you do not use the machine for a while. About Energy Saver mode, see page 44. About Auto Off Timer, see page 125.

Power Switches

can make copies.

This machine has the operation switch and main power switch.

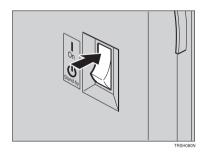
Operation switch (right side of the operation panel)
 Press this switch to activate the machine. When the machine has warmed up, you

☐ Main power switch (left side of the machine)

When the machine is not to be used for an extended period of time, turn off the main power switch.

Starting the Machine

- Make sure that the power cord is plugged into the wall outlet firmly.
- Turn on the main power switch.



Turning on the Power

Press the operation switch to make the **On** indicator light up.



- If the power is not turned on when the operation switch is pressed, check if the main power switch is on. If off, turn it on.
- During the warm-up period (about 7 minutes), you can use the Auto Start function.
 See page 46.



When the machine is set for user codes

Enter your user code using the [Number] keys. Then press the [#] key.



☐ To prevent others from making copies with your user code, press the [Clear Modes] key and the [Clear /Stop] key simultaneously after copying.



☐ For setting user codes, see page 131.

When the Energy Saver indicator is lit

The machine is in Energy Saver mode.

Press any key.

The machine will return to the ready condition.



☐ The machine will also return to the ready condition when an original is set in the document feeder, or when the platen cover or the document feeder is opened.

Originals

Standard Size Originals

The machine will detect original of the following sizes and directions as standard size originals:

☐ When you set originals on the exposure glass (platen glass)

Metric version	A3□, B4□, A4□□, B5□□, 81/2" x 13"□
Inch version	11" x 17"□, 10" x 14"□, 81/2" x 14"□, 81/2" x 13"□, 81/2" x 11"□□

☐ When you set originals in the document feeder

Metric version	A3, B4, A4, B5, B5, A5, B6, B6, A5, A5, B6, A5, A5, A5, B6, A5, A5, A5, A5, A5, A5, A5, A5, A5, A5
Inch version	A4□□,11" x 17"□, 11" x 15"□, 10" x 14"□, 81/2" x 14"□, 8" x 13"□, 81/2" x 11"□□, 8" x 10"□, 51/2" x 81/2"□□

Recommended Originals

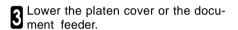
☐ Regarding originals that the document feeder can handle, **☞** see page 188.

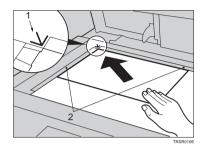
Non-recommended Originals for the Document Feeder					
B	Note				
	The following types of originals are not recommended for use with the documen feeder. Place them directly on the exposure glass (platen glass).				
	Originals thicker than 128g/m², 34 lb		OHP transparencies		
	Originals thinner than 40g/m², 11 lb		Translucent paper		
	For originals between 40 and 52g/m ² , 11 and 14 lb, the document feeder must be set to Thin Paper mode with the user tools. See page 133.		Pasted originals		
			Damp originals		
			Sticky originals		
	Originals larger than A3, 11" x 17"		Wavy originals		
	Originals smaller than B6 \(\subseteq \subseteq 51/2 \square x \)		Originals that are not made from paper		
	Folded, curled, creased, or damaged originals		Originals written in pencil on both sides, or two-sided carbon originals		
	Mailing labels, or perforated originals		Thermal fax paper, CRO (camera		
☐ Bound, stapled, or clipped originals			ready originals) or aluminum foil		

□ Books, pamphlets, and booklets

Setting Originals on the Exposure Glass (Platen Glass)

- Lift the platen cover or the document feeder.
- 2 Set the original face down on the exposure glass (platen glass). The original must be aligned with the rear left corner.





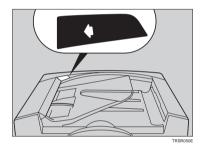
- 1. Reference mark
- 2. Scale

Setting a Stack of Originals in the Document Feeder

You can insert a stack of originals into the document feeder. These originals are individually fed onto and removed from the exposure glass (platen glass).

Note

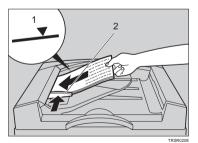
- ☐ Some originals are unsuitable for the document feeder. ◆ See page 14.
- Do not press down or hold originals after inserting them.
- While originals are fed from the original table to the exposure glass (platen glass), do not pull them out.
- Do not lift the document feeder until the original has been completely fed out.
- Correct any curl, fold, or crease in the originals before setting the originals.
- 2 Make sure the **Insert Original** indicator is lit and the exposure glass (platen glass) is clear of originals.



- Adjust the guide to the original size.
- Set the originals <u>face up</u> into the document feeder until the **Insert Original** indicator goes off.



- The last page should be on the bottom.
- ☐ The original guide must touch the front side of the originals.
- Do not stack originals above the limit mark.



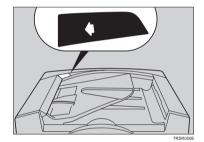
- 1: Limit mark
- 2: Original guide

Setting one Original at a Time in the Document Feeder

If you set one original at a time in the document feeder, the second and subsequent originals can be fed and copied automatically without pressing the **[Start]** key.

Note

- Do not press down or hold originals after inserting them.
- While originals are fed from the original table to the exposure glass (platen glass), do not pull them out.
- ☐ Do not lift the document feeder until the original has been completely fed out.
- Correct any curl, fold, or crease in the originals before setting.
- Make sure the **Insert Original** indicator is lit and the exposure glass (platen glass) is clear of originals.



- Adjust the guide to the original size.
- Set the original <u>face up</u> into the document feeder until the **Insert Original** indicator goes off.
- If you are copying a stack of originals one sheet at a time and you want to keep them in order, start with the last page of the originals.
- ☐ The original guide must touch the front side of the original.

- Press the [Start] key.
- While the **Auto Feed** indicator is lit after an original is fed, set the next original. The original is automatically fed and copied.



☐ You can adjust the time the machine waits before being ready for the next original with the user tools.
☐ See page 133.



Setting Originals of Different Sizes in the Document Feeder

You can insert a stack of originals of different standard sizes (e.g. A4, B5 etc.) into the document feeder. These originals are individually fed onto and removed from the exposure glass (platen glass).

Preparation

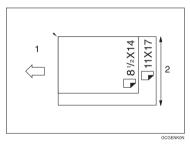
To use this function, you have to select ADF Mixed Sizes mode with the user tools. See page 133.

Limitation

- $\hfill\Box$ The weight of originals that can be set with this function is 52 81g/m², 14 20 lb.
- Smaller size originals might be skewed a little.

Note

- ☐ If your stack of originals contains pages of different sizes, make sure that:
 - Longer originals are at the bottom of the stack, and shorter originals are at the top.
 - All originals are flush with the back fence of the document feeder.
- Align the rear and left edges of the originals as shown in the illustration.



- 1: Set into the document feeder
- 2: Vertical size
- Adjust the guide to the widest original size.
- Set the aligned originals face up into the document feeder.

Setting Non-standard Sized Originals

When copying from non-standard sized originals, enter the original size so that copy is well aligned.

Limitation

☐ You must set your non-standard size originals on the exposure glass (platen glass).

P Reference

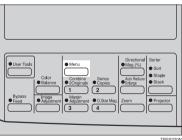
☐ For the standard sizes the machine can detect, ◆ see page 14.

Note

☐ The dimensions you can enter must be within the following ranges:

Vertical size	50 - 297mm (in 1mm steps), 2.0" - 11.7" (in 0.1" steps)	
Horizontal size 50 - 432mm (in 1mm steps), 2.0" - 17" (in 0.1" steps)		

- Select the copy paper size.
- Press the [Menu] key.



1H5522

Make sure that the [Custom Size Orig.] is selected, then press the [Select] key.



Enter the vertical original size with the [Number] keys, then press the

or [#] key.



- Note
- To change the value entered, press the [Clear/Stop] key and enter the new value.
- Enter the horizontal original size with the [Number] keys, then press the [OK] key.



Set your original on the exposure glass (platen glass), then press the [Start] key.

Removing the Platen Cover to Copy a Large Original

You can remove the platen cover to copy a large (more than A3, 11" × 17") original.

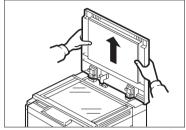


You cannnot remove the document feeder.

To remove the platen cover, lift it out.



Lift the platen cover with both hands. Place the removed cover on a flat surface such as a desk and where it will not be damaged.



TRSH090

To reset the platen cover, align the pins of the platen cover and the holes of the copier. Then push the platen cover into the copier.



TRSH100E

Copying

Basic Operation

How to Make Copies

- Set your original on the exposure glass (platen glass) or in the document feeder. See page 15, 16, or 17.
- 2 Confirm that the [Auto Text / Photo], [Auto Color Select], [Auto] (Auto Paper Select), and [100%] are selected. If not, select these settings.

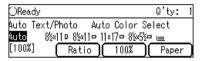


- ☐ Auto Text / Photo see page 31.
- ☐ Auto Color Select

 see page 27.
- ☐ Auto Paper Select see page 35.
- Enter the number of copies required using the **[Number]** keys.



To change the number entered, press the [Clear/Stop] key, then enter the new number.

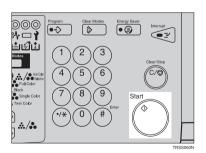




Press the [Start] key.



- ☐ To stop the machine during a multicopy run, press the [Clear/Stop] key.
- To return the machine to the initial condition after copying, press the [Clear Modes] kev.



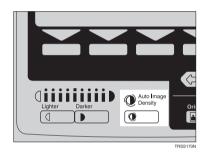
Adjusting Copy Image Density

Image density affects the contrast of copies. With these functions you can control the image density so that copies match originals. Make the selection you require then set your originals and press the **[Start]** key.

Auto image density

The machine automatically controls the image density.

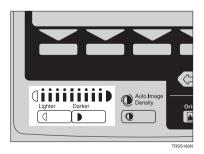
- Note
- Auto Image Density and Auto Color Selection cannot be set together.
- If Auto Color Selection mode is selected, select other color modes to cancel it.
 See page 27.
- Press the [Auto Image Density] key to light the Auto Image Density indicator.



Manual image density

If you require darker or lighter copies, adjust the image density yourself.

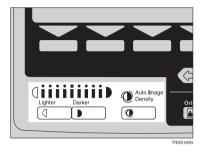
- If the Auto Image Density indicator is lit, press the [Auto Image Density] key to cancel it.
- Press the [Lighter] (left) key to lower the image density. Press the [Darkers] (right) key to increase the image density.



Combined auto and manual image density

Use when copying originals with a dirty background (such as newspapers). You can adjust the foreground density while masking out the dark background.

- If Auto Color Selection mode is selected, select other color modes to cancel it. See page 27.
- Press the [Auto Image Density] key to light the Auto Image Density indicator.
- Press the [Lighter] or [Darker] key to adjust the density.



Selecting a Color Mode

Select a color mode that best suits your originals and copying requirements.

Auto color selection mode

The machine automatically detects whether the original has color parts or not. Originals containing only black images will be copied in Black mode. Originals with some color areas will be copied in Full Color mode.



- ☐ If you make one copy set of a black original using the document feeder, it is recommended to select Black mode. If you choose Auto Color Selection mode, the machine will reset the color selection for every original page, taking a long time to complete the job.
- Make sure that the Auto Color Selection indicator is lit.



- ☐ If not, press the ♠ ♥ keys to light the Auto Color Selection indicator.
- **2** Set your originals, then press the **[Start]** key.



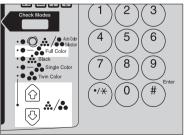
rrss390

Full color copy mode

This function makes copies in full color.



- ☐ You can adjust the overall color tone of copies. See page 88.
- Press the keys to light the **Full Color** indicator.
- 2 Set your originals, then press the [Start] key.

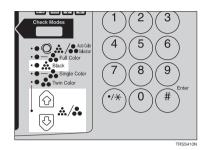


TRSS400F

Black copy mode

This function makes copies in black.

- Press the **♠ ♥** keys to light the **Black** indicator.
- 2 Set your originals, then press the [Start] key.

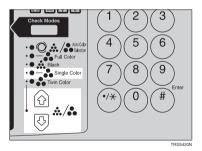


Single color mode

This function makes copies in single colors.



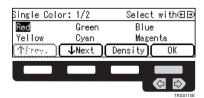
- ☐ You can choose one of the following colors: Red, Green, Blue, Yellow, Cyan, Magenta, Yellow Green, Orange, Marine Blue, Beige, Pink, and Purple
- Reference
- ☐ For copy samples, **s** see page 4 of the Color Copy Quick Guide.
- Press the ① keys to light the **Single Color** indicator.



2 Select the color with the ● keys. Then press the [OK] key.



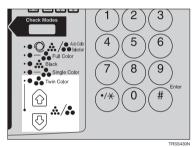
- ☐ You can select the color density level after pressing the [Density] key.
- Set your originals, then press the [Start] key.



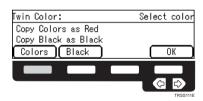
Twin color mode

This function makes copies with black parts in the selected color and other parts in the other selected color.

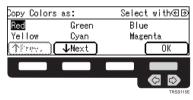
- Reference
- ☐ For copy samples, see page 6 of the Color Copy Quick Guide.
- ☐ You can have colored areas copied in one of the following colors: Red, Green, Blue, Yellow, Cyan, Magenta, Yellow Green, Orange, Marine Blue, Beige, Pink, and Purple
- ☐ You can have Black areas copied in one of the following colors: Red, Green, Blue, Yellow, Cyan, Magenta, Yellow Green, Orange, Marine Blue, Beige, Pink, Purple, and Black
- Press the weys to light the Twin Color indicator.

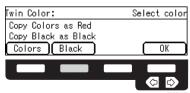


Press the [Colors] key.

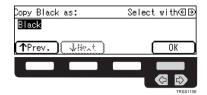


- Select the color you want to copy in for the color parts of the original with the keys. Then press the [OK] key.
- Press the [Black] key.





Select the color you want to copy in for the black parts of the original with the keys. Then press the [OK] key.



Set your originals, then press the [Start] key.

Selecting the Original Image Type (Photo/Text)

To optimize the likeness between copies and originals, select an image type that matches your originals.



☐ You can adjust the readability of black lettering in colored areas, see page 91.

Auto Text/Photo mode

This mode automatically detects the areas of your original containing text or photographs. The text areas are copied using Text mode, and the photographs are copied with Photo mode.



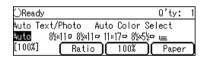
☐ There are 3 types of Photo mode:

[Press Print]: Use when copying photographs or pictures that are printed on paper (e.g. magazines).

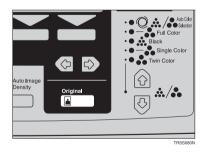
[Glossy Photo]: Use when copying developed photographs.

[2nd Generation]: Use when copying copies or originals printed from printers.

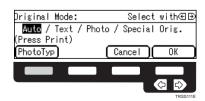
Make sure that the [Auto Text/Photo] appears on the display.



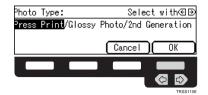
If you want to select photo type for the photo parts, press the [Original] key.



Press the [Photo Typ] key.



Select your desired photo type with the ⊕ keys. Then press the [OK] key.

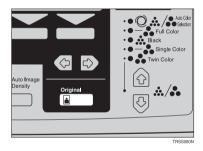


- Press the [OK] key.
- Set your originals, then press the [Start] key.

Text mode

This mode is suitable for copying originals consisting of characters, line diagrams, and letter, but not photograph images.

Press the [Original] key.



- 2 Select [Text] with the ⊕ keys. Then press the [OK] key.
- Set your originals, then press the [Start] key.

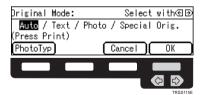


Photo mode

This mode is suitable for copying originals consisting of pictures, photographs, and screened letters/areas, but not solid letters.



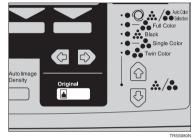
☐ There are 3 types of Photo mode:

[Press Print]: Use when copying photographs or pictures that are printed on paper (e.g. magazines).

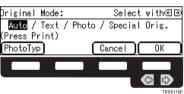
[Glossy Photo]: Use when copying developed photographs.

[2nd Generation]: Use when copying copies or originals printed from printers.

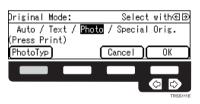
Press the [Original] key.



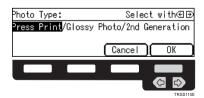
7 Select [Photo] with the € keys.



Press the [Photo Typ] key.



Select your desired photo type with the ⊕ keys. Then press the [OK] key.

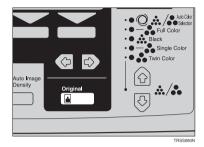


- Press the [OK] key.
- Set your originals, then press the [Start] key.

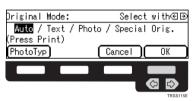
Special Original mode

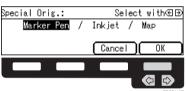
Use this function for originals written in marker pen, originals printed from inkjet printers, or maps.

Press the [Original] Key.



- 2 Select [Special Orig.] with the ⊕
 keys. Then press the [OK] key.
- Select your desired original type with the 🖘 keys. Then press the [OK] key.





Set your originals, then press the [Start] key.

Selecting the Copy Paper Size

Select a suitable size of copy paper based on the original size and the reproduction ratio.

Auto paper select

The machine automatically selects a suitable size of copy paper based on the original size and the reproduction ratio.



☐ Regarding functions that cannot be used together with this function, ***** see page 96.



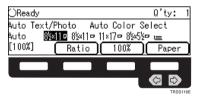
- Depending on the original type and size you use, the machine cannot detect original size. In this case, select paper size manually.
- Make sure that the [Auto] is selected on the display.



Manual paper select

You can select the copy paper manually.

 $lackbox{1}{f Select}$ the copy paper with the $lackbox{4}{f E}$ keys.



Copying from the Bypass Tray

Use the bypass tray to copy onto thick paper, adhesive labels, OHP transparencies, or non-standard size paper. Also use the bypass tray to copy onto the reverse side of paper that has already been copied onto.



☐ The following limitations apply:

Acceptable paper types	Normal paper (52 – 105g/m², 14 – 28 lb) Thick paper (105 – 160g/m², 28 – 43 lb) Post cards OHP transparencies Adhesive labels Translucent paper		
	Standard size	Metric version: ☐: A3, B4, A4, B5, A5, B6, A6, 12" x 18", 11" x 17" ☐: A4, B5, A5, 81/2" x 11"	
		Inch version: □: 12" x 18", 11" x 17", 81/2" x 11", 51/2" x 81/2" □: 81/2" x 11", 51/2" x 81/2"	
	Non-standard size 1: Horizontal 2: Vertical 3: Feed direction	Metric version: Vertical: 100 – 305mm (in 1mm steps) Horizontal: 140 – 457mm (in 1mm steps)	
		Inch version: Vertical: 3.9" – 12.0" (in 0.1" steps) Horizontal: 5.5" – 18.0" (in 0.1" steps)	
Number of sheets that can be set at one time	Normal paper: Thick paper, OHP transpare Adhesive labels: Translucent paper: Post cards:	50 sheets encies: 30 sheets (smaller than 8" x 13") 15 sheets (8" x 13" or larger) 30 sheets 50 sheets 25 sheets	

Select one of following settings or key:

[Normal]: normal paper

[Thick]: thick paper, post cards, adhesive labels, translucent paper

[OHP]: OHP transparencies

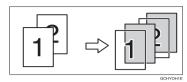
[Duplex]: Use for copying onto the reverse side of paper that has been already copied onto. See page 41.

[Duplex Thick]: Use for copying onto the reverse side of thick paper (105-160g/m², 28-43 lb) that has been copied onto. See page 41.

[Custom]: Use to specify a non-standard sized. ☞ See page 39.

☐ If the copy paper is bend, correct it before setting paper in the bypass tray. If the bent is not corrected, a paper misfeed might occur.

When you copy onto OHP transparencies, you can select whether a blank slip sheet is inserted between OHP transparencies

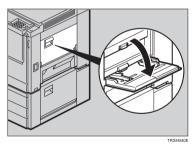


- When you set several sheets at a time, fan them to get air between them before loading.
- ☐ If the copy paper is curled, gently roll it to remove the curl.
- ☐ When you copy onto OHP transparencies, insert them with the copy side up.
- ☐ Do not stack copy paper above the limit mark.
- ☐ When setting non-standard size paper, be sure to set the size after pressing the [Custom] key.

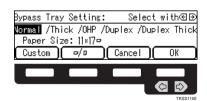
Copying onto standard size paper with the bypass tray



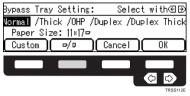
- When you copy onto the reverse side of paper that has been already copied onto,
 See page 41.
- Open the bypass tray.

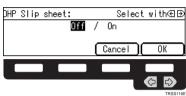


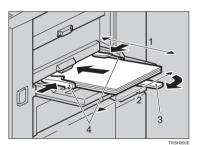
2 Select [Normal], [Thick] or [OHP] with the keys.



- Press the [_/_] key to select paper direction.
- When you select [OHP] in step 2, press the [OK] key then select whether blank slip sheets are inserted between OHP transparencies with the Pe keys.
- Note
- When you select [On], make sure that the paper for slip sheets is identical in size and direction to the OHP transparencies set in the paper tray.
- Press the [OK] key.
- Adjust the paper guides to the paper size.
- Note
- Make sure that the paper guides match the paper size. If the paper guides are not adjusted to the paper size properly, paper might be skewed or paper misfeed might occur.
- ☐ With large copy paper (more than A4, 81/2" x 11", swing out the extender.
- With the side you wish to copy onto face up, insert the paper into the bypass tray until it stops.
- Set your originals, then pres the [Start] key.





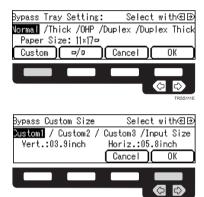


- 1: Horizontal size
- 2: Vertical size
- 3: Extender
- 4: Paper guides

Copying onto non-standard size paper with the bypass tray

- Preparation
- ☐ You can register non-standard paper sizes you use often in keys [Custom 1], [Custom 2], and [Custom 3] with the user tools. See page 126.
- Note
- ☐ Be sure to set the size. Otherwise, a paper misfeed might occur.
- Open the bypass tray.
- 2 Select one of desired paper types or settings with the **⊕** keys.
- Press the [Custom] key.

- Select [Custom1], [Custom2], [Custom 3] or [Imput Size] with the ⊕ keys. Then press the [OK] key.
- Note
- ☐ If you select [Custom1], [Custom2] or [Custom3] go to step 8.
- If you select [Imput Size] in step 4, enter the vertical paper size with the [Number] keys, then press the → or [#] key.
- Note
- To change the value entered, press the [Clear/Stop] key and enter the new value.
- Enter the horizontal paper size with the [Number] keys, then press the [OK] key.



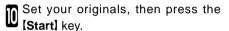


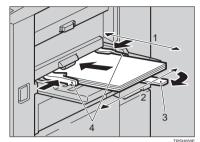
Press the [OK] key.

Adjust the paper guides to the paper size.



- Make sure that the paper guides match the paper size. If the paper guides are not adjusted to the paper size properly, paper might be skewed or paper misfeed might occur.
- With the side you wish to copy onto face up, insert the paper into the bypass trav.





- 1: Horizontal size
- 2: Vertical size
- 3: Extender
- 4: Paper guides

Making A3, 11" × 17" full bleed copies

If you adjust the paper guides of the bypass tray to 12" size, A3, 11" \times 17" full bleed copying mode is automatically selected. In this mode, you can make A3, 11" × 17" full bleed copies with 12" × 18" paper. This is useful to make A3, 11" × 17" size copies with colored background (e.g. catalogues).

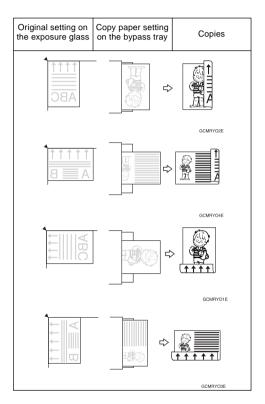


- \square This function can be used only with 12" \times 18" paper.
- ☐ When A3, 11" × 17" full bleed copying mode is selected, the paper direction is automatically changed to widthwise

Copying onto the reverse side of paper that has been already copied onto

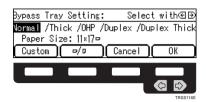
Note

- ☐ If you want to copy onto thick paper (105-160g/m², 28-43 lb), select [Duplex Thick].
- ☐ Make sure that you set your original and the copy paper in the correct direction to achieve the results you require.



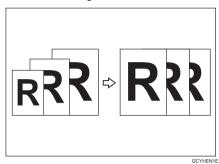
- You cannot use this function for OHP transparencies, translucent paper, adhesive labels and postcards.
- ☐ Do not use copy paper that has been already copied on with other machines.
- ☐ If the copy paper is bend, correct it before setting paper in the bypass tray. If the bent is not corrected, a paper misfeed might occur.

- Open the bypass tray.
- 2 Select [Duplex], or [Duplex Thick] with the ⊕ ▶ keys.
- Note
- When you copy onto non-standard size paper, press the [Custom] key and select or enter the size. For details, see page 39.
- Press the [OK] key.
- Adjust the paper guides to the paper size.
- Note
- Make sure that the paper guides match to the paper size. If the paper guides are not adjusted to the paper size properly, paper might be skewed or paper misfeed might occur.
- Insert the paper into the bypass tray.
- Note
- ☐ Make sure that front side (the side that has been copied onto) faces down.
- Set your originals, then press the [Start] key.



Auto Reduce/Enlarge—Having the Machine Choose the Reproduction Ratios

The machine can select the proper reproduction ratio based on the selected paper size and the original size.





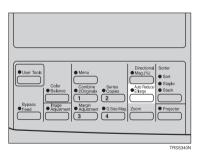
☐ Regarding functions that cannot be used together with this function, see page 96.

Example:

Metric version: original: A3□, copy paper: A4□

Inch version: original: $11" \times 17" \overrightarrow{\square}$, copy paper: $81/2" \times 11" \overrightarrow{\square}$

Press the [Auto Reduce/Enlarge] key.



- Set your originals.
- Choose your copy paper size (e.g. A4 \square , 81/2" \times 11" \square).
- Press the **(Start)** key. The original image is enlarged or reduced to fit the selected copy paper.

Energy Saver Mode—Saving Energy

If you do not operate the machine for a certain period after copying, or when you press and hold the **[Energy Saver]** key for more than one second, the display disappears and the machine enters Energy Saver mode. When you press the **[Energy Saver]** key again, when the originals are set in the document feeder, or when the platen cover or document feeder is opened, the machine returns to the ready condition. In Energy Saver mode, the machine uses less electricity.

Hold down the **[Energy Saver]** key more than one seconds to enter Energy Saver mode.



□ To cancel this mode, press the [Energy Saver] key again.



Interrupt Copying—Temporarily Stopping one Job to Copy Something Else

Use the **[Interrupt]** key to interrupt a multicopy run and make urgently needed copies.

- Reference
- ☐ Regarding functions that cannot be used together with this function, **s** see page 96.
- Press the **(Interrupt)** key. The machine will stop the copy run and store the present settings in the memory. The machine will return to the ready condition.

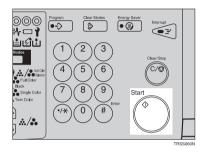


- Remove the previous originals. Set your originals for interrupt copying on the exposure glass (platen glass) or in the document feeder.
- Make your copies.
- After interrupt copying is completed, press the **[Interrupt]** key again. The machine will recall the previous copy settings.
- Reset the previous originals and press the [Start] key to resume the previous run.

Auto Start—Entering Copy Job Settings During the Warm-up Period

If you press the **[Start]** key during the warm-up period, the **[Start]** key will blink and the machine will start copying after the warm-up period.

- Set your copy settings during the warm-up period.
- Press the (Start) key.
- Note
- To cancel Auto Start, press the [Clear/ Stop] key.

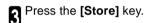


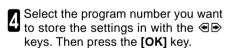
Program—Storing and Recalling Your Copy Settings in Memory

You can store up to five frequently used copy job settings in machine memory and recall them for future use.

Storing your settings

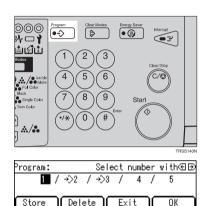
- Set the copy settings you want to put into memory.
- Press the [Program] key.

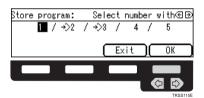






If this program number is already used, the machine asks whether you wish to overwrite it or not. Press the [Yes] or [No] key.



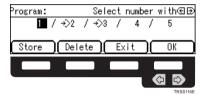


Recalling your settings

Press the [Program] key.



- **2** Select the program number you want to recall with the **④** ▶ keys.
- Note
- ☐ Only programs with � contain a program.
- Press the **[OK]** key. The stored settings are displayed.
- Set your originals, then press the [Start] key.

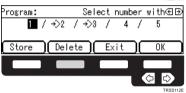


Deleting a program

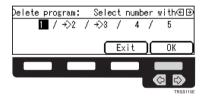
Press the (Program) key.



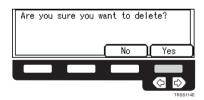
Press the [Delete] key.



Select the program number that contains the program you wish to delete with the ఆ ▶ keys. Then press the [OK] key.



Press the [Yes] key.



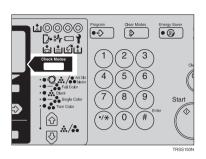
Press the [Exit] key.

Check Modes—Checking the Selected Copy Jobs

By pressing the **[Check Modes]** key, you can see at a glance the modes you have selected.

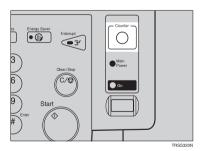


- ☐ You can check the following modes:
 - Book → 1 Sided
 - 2 Sided → 1 Sided
 - Combine
 - Margin Adjustment
 - Centering
 - Cover
 - Color Conversion
 - Color Erase
 - Mirror
 - Positive/Negative
 - Bypass Feed Copying



Counter—Checking the Total Number of Copies Made

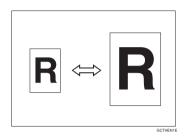
By pressing the **[Counter]** key, you can check the total number of copies made.



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Reduce/Enlarge—Reducing and Enlarging

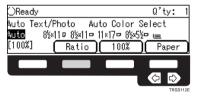
Preset R/E—Reducing and Enlarging Using Preset Ratios



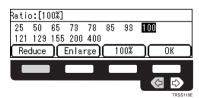
- Reference
- ☐ Regarding functions that cannot be used together with this function, see page 96.
- Note
- ☐ You can add up to two preset ratios with the user tools. ◆See page 129.
- ☐ You can select a ratio regardless of the size of an original or copy paper. With some ratios, parts of the image might not be copied or margins will appear on copies.
- \square To return to 100%, press the **[100%]** key.

Reducing

Press the [Ratio] key.



Press the [Reduce] or • key to select the reducing ratio.



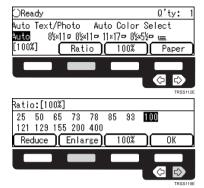
- Press the [OK] key.
- Set your originals, then press the [Start] key.

Enlarging

Press the [Ratio] key.

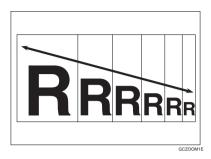
Press the [Enlarge] or

key to select the enlarging ratio.



- Press the [OK] key.
- Set your originals, then press the [Start] key.

Zoom—Reducing and Enlarging in 1% Step



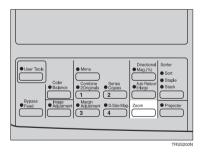
You can change the reproduction ratio from 25% to 400% in 1% steps.



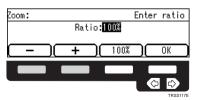
- You can select a ratio regardless of the size of an original or copy paper. With some ratios, parts of the image might not be copied or blank margins will appear on copies.
- ☐ To return to 100%, press the [100%] key.
- ☐ You can select a preset ratio which is near the desired ratio, then press the **[Zoom]** key and adjust the ratio with the [+] or [-] key.
- ☐ There are two ways to set the ratios.

Using the [-] and [+] keys

Press the [Zoom] key.

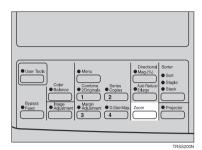


- 2 Adjust the reproduction ratio with the [-] or [+] key.
- Press the [OK] key.
- Set your originals, then press the [Start] key.

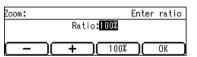


Using the [Number] keys

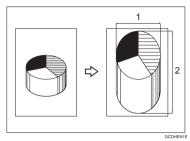
Press the [Zoom] key.



- 2 Enter the reproduction ratio with the [Number] keys.
- Press the [OK] key.
- Set your originals, then press the [Start] key.



Directional Magnification (%)—Stretching and Squeezing the Image in 1% Steps

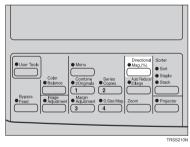


- 1: Horizontal %
- 2: Vertical %

Copies can be reduced or enlarged at different reproduction ratios horizontally and vertically.



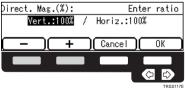
- ☐ You can select the ratio from 25% to 400%.
- ☐ You can select a ratio regardless of the size of an original or copy paper. With some ratio, parts of the image might not be copied or blank margins will appear on copies.
- Press the [Directional Mag.(%)] key.



2 Enter the vertical ratio with the [Number] keys or the [+] [-] keys.

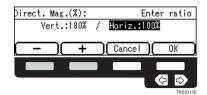


☐ To change the ratio entered, press the [Clear/Stop] key and enter the new ratio.



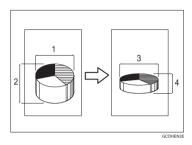
Press the 🕞 or [#] key.

Enter the horizontal ratio with the [Number] keys or the [+] [-] keys.



- Press the [OK] key.
- Set your originals, then press the [Start] key.

Directional Size Magnification (inch)—Stretching and Squeezing the Image into the Copy Area



- 1: Horizontal original size
- 2: Vertical original size
- 3: Horizontal copy size
- 4: Vertical copy size

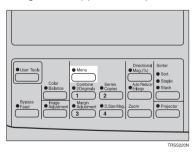
The suitable reproduction ratios will be automatically selected when you enter the horizontal and vertical lengths of the original and copy image you want.



☐ You can enter sizes within the following ranges:

Metric Version	1 - 999mm (in 1mm steps)
Inch Version	0.1" - 99.9" (in 0.1" steps)

- ☐ If the calculated ratio is over the maximum or under the minimum ratio, it is corrected within the range of the ratio automatically. However, with some ratios, parts of the image might not be copied or blank margins will appear on copies.
- Press the [Menu] key.
- Note
- ☐ If you assign Directonal Size Magnification (inch) function to one of the (Favorite) keys, press it and go to step 4. To assign a function to the [Favorite keys, * see page 134.



Press the [↓Next] key until [D. Size Mag. (inch)] is displayed.



Function Menu:1/3

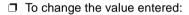
Select [D. Size Mag. (inch)] with the keys, then press the [Select] key.



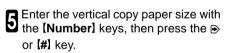
Select with⊕ ⊕

Enter the vertical original size with the [Number] keys, then press the
or [#] key.





- If you have not pressed the
 or
 [#] key yet, press the [Clear/Stop] key and enter the new value.
- If you have already pressed the
 or [#] key, select [Orig.:Vert.] with
 the
 ⊕ key and enter the new
 value.





- If you press the [OK] key after entering the vertical original and paper sizes, the horizontal ratio will become same as the vertical ratio automatically.
- Enter the horizontal original size with the [Number] keys, then press the
 or [#] key.

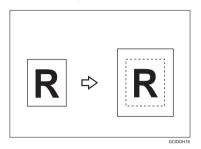




- Enter the horizontal copy paper size with the [Number] keys, then press the [#] key.
- Press the [OK] key.
- Set your originals, then press the [Start] key.

Shifting the Image

Centering

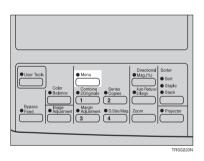


You can move the image to the center. This function is convenient when the copy paper is larger than the original.

Press the [Menu] key.



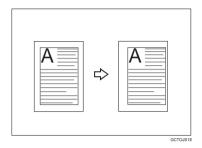
- If you assign Centering function to one of the [Favorite] keys, press it and go to step 4. To assign a function to the [Favorite] keys, see page 134.
- 2 Select [Centering] with the ⊕ keys. Then press the [Select] key.





- Press the [Exit] key.
- Select the copy paper size.
- Set your originals, then press the [Start] key.

Margin Adjustment—Adding Margins for Binding



You can make a margin by shifting the image to the left or right. This function is convenient when you want to bind copies.



☐ You can change the width of the binding margin as follows.

Metric Version	0 - 20mm (in 1mm steps)
Inch Version	0" - 0.8" (in 0.1" steps)

☐ The margin width default is as follows. You can change this default setting with the user tools. See page 129.

Metric Version	10mm Left
Inch Version	0.4" Left

☐ If you set too wide margin, areas you do not want to delete might be erased.

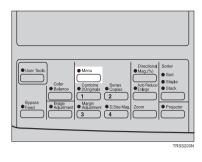
P Reference

☐ Regarding function that cannot be used together with this function, see page 96.

Press the [Menu] key.



- ☐ If you assign Margin Adjustment function to one of the [Favorite] keys, press it and go to step 3. To assign a function to the [Favorite] keys, see page 134.
- Select [Magin Adjustment] with the ⊕ keys. Then press the [Select] key.

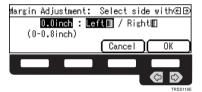




3 Select [Left] (left margin) or [Right] (right margin) with the ⊕ keys. Then enter the desired margin width with the [Number] keys.

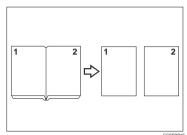


- To change the value entered, press the [Clear/Stop] key and enter the new value.
- Press the [OK] key.
- Set your originals, then press the [Start] key.



Series Copies—Making Single Copies

Book→1 Sided—From Book Originals to 2 One-sided Copies



This function makes one-sided copies from two facing pages of bound (book) originals.

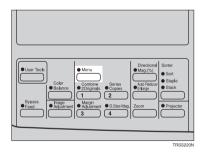
Reference

☐ Regarding functions that cannot be used together with this function, see page 96.

Press the [Menu] key.



□ If you assign Series Copies function to one of the [Favorite] keys, press it and go to step 4. To assign a function to the [Favorite] keys, see page 134.



Press the [↓Next] key until [Series] is displayed.



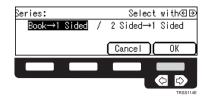
Make sure that [Series] is selected, then press the [Select] key.



If your machine do not have the document feeder, go to step 5.



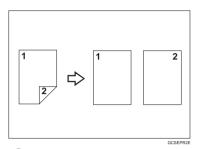
Make sure that [Book \rightarrow 1 Sided] is selected, then press the [OK] key.



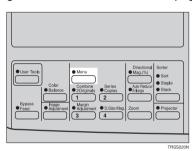
- Select the copy paper size.
- Set your originals, then press the [Start] key.

2 Sided \rightarrow 1 Sided—From Two-sided Originals to 2 One-sided Copies

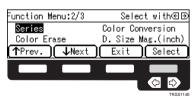
The optional document feeder is required to use this function.



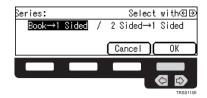
- Reference
- ☐ Regarding functions that cannot be used together with this function, see page 96.
- Press the [Menu] key.
- Note
- ☐ If you assign Series Copies function to one of the [Favorite] keys, press it and go to step 4. To assign a function to the [Favorite] keys, see page 134.
- Press the [↓Next] key until [Series] is displayed.
- Make sure that [Series] is selected, then press the [Select] key.







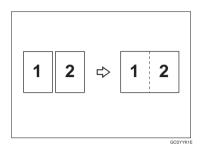
Select [2 Sided → 1 Sided] with the ⊕ keys, then press the [OK] key.



- Select the copy paper size.
- Set your originals in the document feeder, then press the **[Start]** key.

Combine—Combining Two Originals

The optional document feeder is required to use this function.



This function automatically combines 2 one-sided originals onto one copy.



- ☐ You cannot use the bypass tray with this function.
- ☐ The machine cannot copy originals different in size and direction.

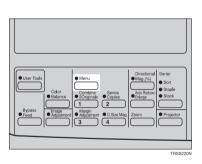
Reference

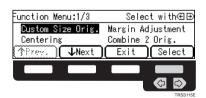
☐ Regarding functions that cannot be used together with this function, see page 96.

Press the [Menu] key.



- ☐ If you assign Combine 2 Originals function to one of the (Favorite) keys, press it and go to step 3. To assign a function to the (Favorite) keys, see page 134.
- Select [Combine 2 Orig.] with the ⊕ keys, then press the [Select] key.



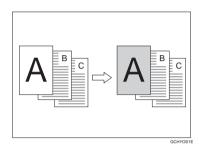


- 3 Select the copy paper size.
- Set your originals in the document feeder, then press the **[Start]** key.

Cover Sheet—Adding or Inserting Sheets

Front Cover—Copying a Front Cover

The optional document feeder is required to use this function.





- ☐ The cover sheets should be identical in size and direction with the copy paper.
- ☐ The cover sheets should be fed from the bypass tray.
- ☐ The covers are copied in Thick Paper mode.

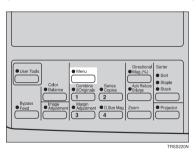
Reference

☐ Regarding functions that cannot be used together with this function, ***** see page 96.

Press the [Menu] key.

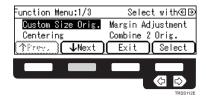
Note

☐ If you assign Cover Sheet function to one of the **[Favorite]** keys, press it and go to step 4. To assign a function to the **[Favorite]** keys, **s** see page 134.

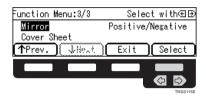


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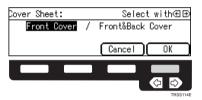
Press the [INext] key until [Cover Sheet] is displayed.



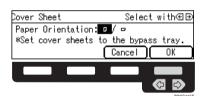
Select [Cover Sheet] with the ⊕ keys, then press the [Select] key.



Make sure that **[Front Cover]** is selected, then press the **[OK]** key.



Select orientation of the copy paper and cover sheets with the ♠ keys, then press the [OK] key.

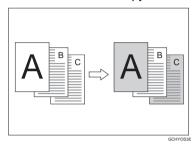


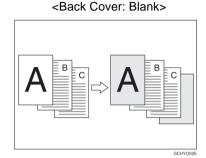
- Set cover sheets into the bypass tray.
- **7** Set your originals in the document feeder.
- Press the [Start] key.

Front & Back Covers—Copying or Adding Front and Back Covers

The optional document feeder is required to use this function.

<Back Cover: Copy>







- ☐ You can specify whether to make a copy on a back cover sheet. If you select [Copy], the last page will be copied on the back cover sheet. If you select [Blank], a cover sheet will just be inserted after the last copy.
- ☐ The cover sheets should be identical in size and direction with the copy paper.
- ☐ The cover sheets should be fed from the bypass tray.
- ☐ The covers are copied in Thick Paper mode.
- $\ \square$ If Blank Cover mode is selected, the back cover will not be counted as a copy.

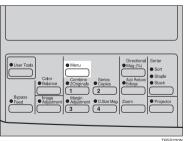
Reference

☐ Regarding functions that cannot be used together with this function, see page 96.

Press the (Menu) key.

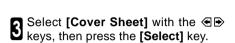


□ If you assign Cover Sheet function to one of the [Favorite] keys, press it and go to step 4. To assign a function to the [Favorite] keys, see page 134.



INOGEE

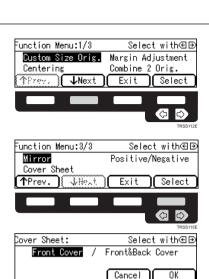
Press the [!Next] key until [Cover Sheet] is displayed.

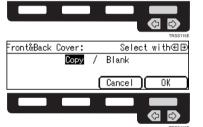


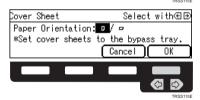
- Select [Front & Back Cover] with the
 keys, then press the [OK] key.
- Specify whether to copy on back cover sheets with the ⑤ keys, then press the [OK] key.
- Select orientation of the copy paper and cover sheets with the ⊕ keys, then press the [OK] key.



- Set your originals in the document feeder.
- Press the [Start] key.







Color Creation

Color Conversion—Converting a Selected Color into a Different Color

This function converts a selected color of an original into a different color on the copy.

Reference

☐ For copy samples, * see page 8 of the Color Copy Quick Guide.

Note

- ☐ Up to 4 colors can be converted at one time.
- ☐ Colors that can be converted: Red, Green, Blue, Yellow, Cyan, Magenta, Black, and White
- Colors you can convert to: Red, Green, Blue, Yellow, Cyan, Magenta, Yellow Green, Orange, Marine Blue, Beige, Pink, Purple, and Black
- ☐ This function can be made more or less sensitive to the color to be converted. It can be adjusted within five levels from "Narrow" to "Wide". ⇐ See page 132.

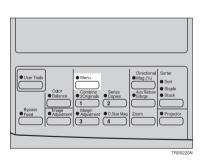
For example, if red is selected as the color to be converted, "Narrow" will result in only red being converted, and "Wide" will result in other colors close to red being converted.

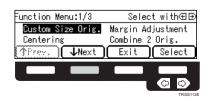
☐ This function can be used in Full Color mode.

Press the [Menu] key.



- ☐ If you assign Color Conversion function to one of the [Favorite] keys, press it and go to step 4. To assign a function to the [Favorite] keys, ★ see page 134.
- Press the [Next] key until [Color Conversion] is displayed.

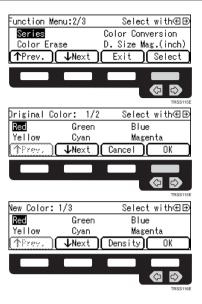


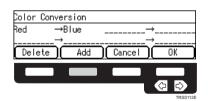


- Select [Color Conversion] with the
 keys, then press the [Select] key.
- Select the original color (color to be converted) with the ⊕ keys, then press the [OK] key.
- 5 Select the new color (color to convert to) with the ఆ ▶ keys.
- If you want to select the color density level, press the [Density] key.
- **7** Select the level with the **⊕** keys. Then press the **[OK]** key.



- Press the [OK] key.
- If you want to convert more than one color, press the [Add] key. Then repeat steps 4 to 8.
- ☐ Repeat step 9 until you have finished designating colors.
- ☐ If you pick the wrong color, press the [Delete] key.
- Press the [OK] key.
- Set your originals, then press the [Start] key.





Color Erase—Erasing the Selected Color

This function erases a selected color from the original image.

Reference

☐ For copy samples, **s** see page 10 of the Color Copy Quick Guide.



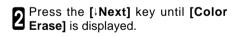
- ☐ Up to 4 colors can be erased at one time.
- ☐ Colors that can be erased: Red, Green, Blue, Yellow, Cyan, Magenta, and Black
- ☐ This function can be made more or less sensitive to the color to be erased. It can be adjusted within five levels from "Narrow" to "Wide". ➡ See page 132.

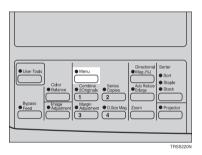
For example, if red is selected as the color to be erased, "Narrow will result in only red being, and "Wide" will result in other colors close to red being erased.

Press the [Menu] key.



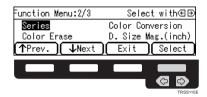
□ If you assign Color Erase function to one of the [Favorite] keys, press it and go to step 4. To assign a function to the [Favorite] keys, see page 134.



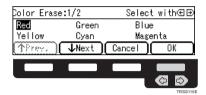




Select [Color Erase] with the ⊕
keys, then press the [Select] key.



Select the color to be erased with the
• keys, then press the [OK] key.



If you want to erase more than one color, press the [Add] key. Then repeat step 4.



- Repeat step 5 until you have finished designating colors.
- ☐ If you pick the wrong color, press the **[Delete]** key.
- Press the [OK] key.
- **7** Set your originals, then press the **[Start]** key.

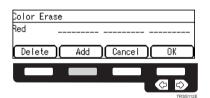
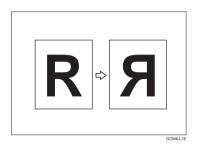


Image Creation

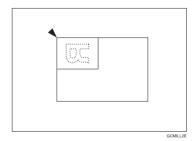
Mirror—Making a Mirror Image



This function makes a mirror image copy of the original.



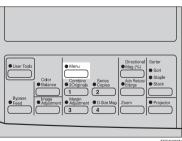
☐ Set the original as below when setting on the exposure glass (platen glass).



Press the [Menu] key.



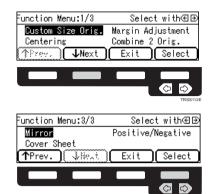
□ If you assign Mirror function to one of the [Favorite] keys, press it and go to step 4. To assign a function to the [Favorite] keys, resee page 134.



THSS220

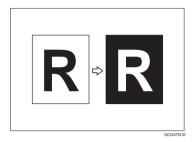
Press the [INext] key until [Mirror] is displayed.





Set your originals, then press the [Start] key.

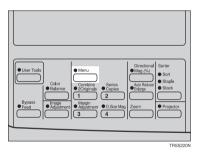
Positive/Negative—Copying in Complementary Colors



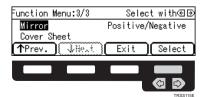
This function copies the original image in complementary colors. If you use a black and white original, black and white areas of the original are reversed.



- ☐ If you copy using twin color mode, white areas are changed to black, black areas are changed to white, and color areas are changed to the selected color.
- Press the [Menu] key.
- Note
- ☐ If you assign Positive/Negative function to one of the [Favorite] keys, press it and go to step 4. To assign a function to the [Favorite] keys, see page 134.
- Press the [INext] key until [positive/Negative] is displayed.







Set your originals, then press the **[Start]** key.

Finishing



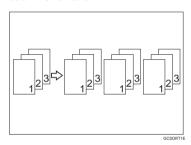
☐ To avoid problems caused by curled copies, try turning over the paper stack in the paper tray. If there is no improvement, change to copy paper with less curl.

Reference

☐ Regarding functions that cannot be used together with this function, see page 96.

Sort—Sorting into Sets (123, 123, 123)

The optional 20-bin sorter stapler, 10-bin sorter stapler, or 3-bin sorter is required to use this function.



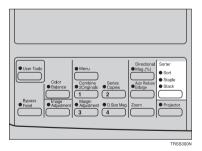
One copy of each original is delivered to each bin and copies are collated into sets.



- ☐ It is recommended to set originals in the document feeder with this function.
- ☐ For sorting, the following limitations apply:

	20-bin sorter stapler		10-bin sorter	3-bin sorter	
	Normal paper mode	Thick paper mode	stapler	1 st bin	2 nd or 3 rd bin
Maximum paper size	: A3, 12" × 18" : A4, 81/2" × 11"	: A3, 12" × 18" : A4, 81/2" × 11"	: A3, 11" × 17" : A4, 81/2" × 11"	: A3, 12" × 18" : A4, 81/2" × 11"	A3, 12" × 18" A4, 81/2" × 11"
Minimum paper size	☐: B5, 81/2" × 11" ☐: B5, 81/2" × 11"	☐: B5, 81/2" × 11" ☐: B5, 81/2" × 11"	: B5, 81/2" × 11" : B5, 81/2" × 11"	.: A6, 51/2" × 81/2" .: A5, 81/2" × 11"	: A6, 51/2" × 81/2" : A5, 81/2" × 11"
Maximum paper capacity of bins (80g/m², 20 lb)	A4, 81/2" × 11" or smaller: 30 copies B4, 81/4" × 13" or larger: 25 copies	A4, 81/2" × 11" or smaller: 15 copies B4, 81/4" × 13" or larger: 12 copies	A4, 81/2" × 11" or smaller: 30 copies B4, 81/4" × 13" or larger: 25 copies	A4, 81/2" × 11" or smaller: 500 copies B4, 81/4" × 13" or larger: 250 copies	A4, 81/2" × 11" or smaller: 250 copies B4, 81/4" × 13" or larger: 125 copies

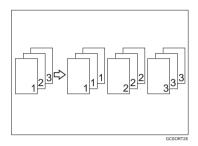
- When you have 3-bin sorter or 10-bin sorter stapler, you cannot use thick paper fed from the bypass tray in Sort mode.
- When you have 10-bin sorter stapler, 12" x 18" size paper cannot be used in Sort mode.
- ☐ You cannot use OHP transparencies or non-standard size paper in Sort mode.
- ☐ You can make the machine select Sort mode automatically when you insert two or more originals in the document feeder and make two or more copies from each original with the user tools.
 See page 133.
- Press the [Sorter] key until the Sort indicator (top) is lit.



- 2 Set your originals in the document feeder.
- Press the (Start) key.

Stack—Stacking Together All Copies of a Page (111, 222, 333)

The optional 20-bin sorter stapler, 10-bin sorter stapler, or 3-bin sorter is required to use this function.



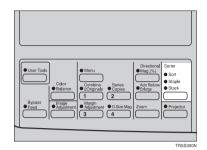
All copies of each original are delivered to the same bin.

☐ For stacking, the following limitations apply:

	20-bin sorter stapler		10-bin sorter	3-bin sorter	
	Normal paper mode	Thick paper mode	stapler	1 st bin	2 nd or 3 rd bin
Maximum paper size	☐: A3, 12" × 18" ☐: A4, 81/2" × 11"	: A3, 12" × 18" : A4, 81/2" × 11"	: A3, 11" × 17" : A4, 81/2" × 11"	: A3, 12" × 18" : A4, 81/2" × 11"	A3, 12" × 18" A4, 81/2" × 11"
Minimum paper size	☐: B5, 81/2" × 11" ☐: B5, 81/2" × 11"	: B5, 81/2" × 11" : B5, 81/2" × 11"	☐: B5, 81/2" × 11" ☐: B5, 81/2" × 11"	.: A6, 51/2" × 81/2" .: A5, 81/2" × 11"	. A6, 51/2" × 81/2" . A5, 81/2" × 11"
Maximum paper capacity of bins (80g/m², 20 lb)	A4, 81/2" × 11" or smaller: 30 copies B4, 81/4" × 13" or larger: 25 copies	A4, 81/2" × 11" or smaller: 15 copies B4, 81/4" × 13" or larger: 12 copies	A4, 81/2" × 11" or smaller: 30 copies B4, 81/4" × 13" or larger: 25 copies	A4, 81/2" × 11" or smaller: 500 copies B4, 81/4" × 13" or larger: 250 copies	A4, 81/2" × 11" or smaller: 250 copies B4, 81/4" × 13" or larger: 125 copies

- ☐ When you have an optional 3-bin sorter or 10-bin sorter stapler, you cannot use thick paper fed from the bypass tray in Stack mode.
- When you have 10-bin sorter stapler, 12" x 18" size paper cannot be used in Stack mode.
- ☐ You cannot use OHP transparencies or non-standard size paper in Stack mode.

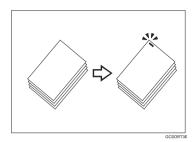
Press the [Sorter] key until the Stack indicator (bottom) is lit.



- 2 Set your originals in document feeder.
- 3 Press the [Start] key

Staple—Stapling Copies

The optional 20-bin sorter stapler, 10-bin sorter stapler is required to use this function.



Each copy set can be stapled together.

- ☐ When you select Staple mode, Sort mode is automatically selected.
- ☐ You cannot use Staple mode with Stack mode.
- When you have an optional 10-bin sorter stapler, you cannot use thick paper fed from the bypass tray in Staple mode.
- ☐ You cannot use OHP transparencies or non-standard size paper in Staple mode.
- You cannot staple different width of paper.
- Stapling position and original setting:

Original setting		Stapling position		
	Exposure glass	Ducument Feeder	20-bin sorter stapler	10-bin sorter stapler
D	I I	R	R	R
		R	PR R	R

☐ For Stapling, the following limitations apply:

	20-bin sorter stapler	10-bin sorter stapler	
	Normal paper mode	Thick paper mode	10-bill softer stapler
Maximum paper size	☐: A3, 11" × 17" ☐: A4, 81/2" × 11"	☐: A3, 11" × 17" ☐: A4, 81/2" × 11"	☐: A3, 11" × 17" ☐: A4, 81/2" × 11"
Minimum paper size	☐: B5, 81/2" × 11" ☐: B5, 81/2" × 11"	☐: B5, 81/2" × 11" ☐: B5, 81/2" × 11"	☐: B5, 81/2" × 11" ☐: B5, 81/2" × 11"
Stapler capacity (80g/m², 20 lb)	30 sheets	15 sheets	20 sheets

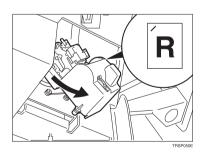
- ☐ In the following cases, the copies will be delivered to the tray without stapling.
 - When the number of copies for one set is over the stapler capacity.
 - When the stapler runs out of staples.

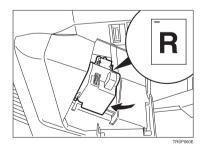
Reference

- ☐ If you want to add staples, see page 111.
- □ When staple is jammed, see page 113.

Changing the staple position

If your machine is equipped with the 20-bin sorter stapler, you can select one of two stapling positions by changing the position of the stapler. Open the front cover of the sorter stapler and perform the actions illustrated below.





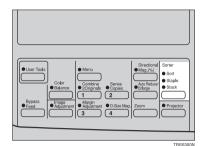
Note

☐ After changing the position of the stapler, the stapler should be clicked in position.

Stapling copies automatically after copying

The optional document feeder is required to use this function.

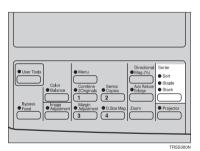
Press the [Sorter] key until the Sort (top) and Staple (centre) indicators are lit.



- **2** Set your originals in the document feeder.
- Press the [Start] key.

Stapling copies manually after copying

Press the **[Sorter]** key until the **Sort** indicator (top) is lit.



- Make your copies.
- After copying is completed, press the [Sorter] key before the Staple indicator stops blinking.

Adjustment and Color Memory

Color Balance—Adjusting and Storing the Color Balance

This function allows you to control the overall color tone of copies by adjusting the Yellow, Magenta, Cyan and Black color balance. Nine levels of tone are available.

Reference

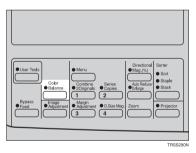
☐ For copy samples, ***** see page 12 of the Color Copy Quick Guide.



- ☐ The color balance will return to the default when:
 - The machine is automatically reset.
 - The [Clear Modes] key is pressed.
 - The operation switch is turned off.
 - The main power switch is turned off.
- ☐ You can store any adjustments you make in memory and recall them later.

Color Balance Adjustment

Press the [Color Balance] key.



2 Select the color to be adjusted with the **⊕** keys.



Enter the level of color tone with the [Number] keys.



□ Default: level 5



- If you want to adjust more than one color, repeat steps 2 and 3.
- Press the [OK] key.

Color Balance Program—Storing and Recalling the Color Balance

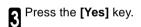
You can store the color balance setting in memory and recall it when you want to use it.

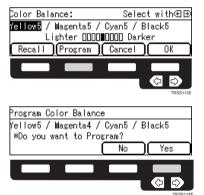


Only one setting can be stored.

Storing the adjusted color balance

- Change the color balance (★ see page 88), but don't press the [OK] key.
- Press the [Program] key.

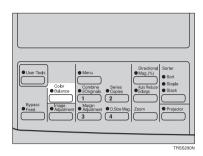




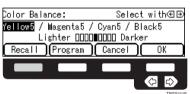
Press the [OK] key.

Recalling the color balance

Press the [Color Balance] key.



Press the [Recall] key.



3 Press the [OK] key.

Image Adjustment

You can change the following default settings for image adjustment:

Sharp/Soft You can adjust the edges of the image to make the image sharper or softer. Reference		
For copy samples,	Sharp/Soft	
Contrast Contrast You can adjust the contrast between light parts and dark parts of the image. Reference □ For copy samples, ✓ see page 14 of the Color Copy Quick Guide. Note □ Default: level 5 Background Density You can adjust the background density control. Reference □ For copy samples, ✓ see page 14 of the Color Copy Quick Guide. Note □ Default: level 5 □ If coping a newspaper or an original with a dark background, adjust the background density to a lighter setting. □ If part of the original is marked with a highlighting pen, adjust the background density to a darker setting. However, because the color of a highlighting pen is difficult to duplicate, it might be copied in different colors or some colors might not be copied. Pastel You can make copies in pastel tones. Reference □ For copy samples, ✓ see page 14 of the Color Copy Quick Guide. Note □ Default: level 9 which yields a normal color copy U.C.R. Adjust this setting to a darker setting when you want to copy letter parts clearly in black.		1
Contrast You can adjust the contrast between light parts and dark parts of the image. Reference □ For copy samples, ✓ see page 14 of the Color Copy Quick Guide. Note □ Default: level 5 Background Density You can adjust the background density control. Reference □ For copy samples, ✓ see page 14 of the Color Copy Quick Guide. Note □ Default: level 5 □ If coping a newspaper or an original with a dark background, adjust the background density to a lighter setting. □ If part of the original is marked with a highlighting pen, adjust the background density to a darker setting. However, because the color of a highlighting pen is difficult to duplicate, it might be copied in different colors or some colors might not be copied. Pastel You can make copies in pastel tones. Reference □ For copy samples, ✓ see page 14 of the Color Copy Quick Guide. Note □ Default: level 9 which yields a normal color copy U.C.R. Adjustment Note □ Default: level 5 □ Adjust this setting to a darker setting when you want to copy letter parts clearly in black.		
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Pastel Pastel You can make copies in pastel tones. Reference □ For copy samples, ✓ see page 14 of the Color Copy Quick Guide. Note □ Default: level 5 □ If coping a newspaper or an original with a dark background, adjust the background density to a lighter setting. □ If part of the original is marked with a highlighting pen, adjust the background density to a darker setting. However, because the color of a highlighting pen is difficult to duplicate, it might be copied in different colors or some colors might not be copied. Pastel You can make copies in pastel tones. Reference □ For copy samples, ✓ see page 14 of the Color Copy Quick Guide. Note □ Default: level 9 which yields a normal color copy U.C.R. Adjustment You can adjust the black toner density to make the black parts clearer in Full Color mode. Note □ Default: level 5 □ Adjust this setting to a darker setting when you want to copy letter parts clearly in black.		Li Derault: level 5
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□ Default: level 5 □ If coping a newspaper or an original with a dark background, adjust the background density to a lighter setting. □ If part of the original is marked with a highlighting pen, adjust the background density to a darker setting. However, because the color of a highlighting pen is difficult to duplicate, it might be copied in different colors or some colors might not be copied. Pastel You can make copies in pastel tones. Reference □ For copy samples, ✓ see page 14 of the Color Copy Quick Guide. Note □ Default: level 9 which yields a normal color copy U.C.R. Adjustment Vou can adjust the black toner density to make the black parts clearer in Full Color mode. Note □ Default: level 5 □ Adjust this setting to a darker setting when you want to copy letter parts clearly in black.		☐ For copy samples, ◆ see page 14 of the Color Copy Quick Guide.
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U.C.R. Adjustment You can adjust the black toner density to make the black parts clearer in Full Color mode. Note Default: level 5 Adjust this setting to a darker setting when you want to copy letter parts clearly in black.		☐ For copy samples, see page 14 of the Color Copy Quick Guide.
U.C.R. Adjustment You can adjust the black toner density to make the black parts clearer in Full Color mode. Note Default: level 5 Adjust this setting to a darker setting when you want to copy letter parts clearly in black.		
Adjustment mode. Note Default: level 5 Adjust this setting to a darker setting when you want to copy letter parts clearly in black.		☐ Default: level 9 which yields a normal color copy
 □ Default: level 5 □ Adjust this setting to a darker setting when you want to copy letter parts clearly in black. 		
Adjust this setting to a darker setting when you want to copy letter parts clearly in black.		
☐ Adjust this setting to a lighter setting when the original image is dark.		☐ Adjust this setting to a darker setting when you want to copy letter parts clearly in
		☐ Adjust this setting to a lighter setting when the original image is dark.

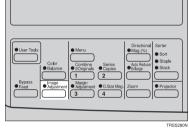
Image Adjustment

A.C.S. (Auto Color Selection) Sensitivity Level	You can adjust the sensitivity when detecting whether the original has color areas in Auto Color Selection mode. When set to "B&W" values, the machine will be more likely to detect originals as black originals. "Full Color" values will cause the machine to be more likely to detect originals as color originals. Note Default: level 3
Auto Separation Sensitivity Level (Text/Photo Adjustment)	You can adjust the sensitivity when detecting letter and photo parts of an original in Auto Text/Photo mode. If letter parts and photo parts of an original are not differentiated correctly, adjust this setting. Note Default: level 5

Sharp/Soft, Contrast, Background Density and Pastel

Note

- ☐ Any settings you make with the Sharp/Soft, Contrast, Background Density Control and Pastel Color functions will be cancelled under the following conditions:
 - The machine is automatically reset.
 - The [Clear Modes] key is pressed.
 - The operation switch is turned off.
 - The main power switch is turned off.
- Press the [Image Adjustment] key.



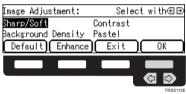
2 Select your desired function with the ⊕ ▶ keys. Then press the [OK] key.

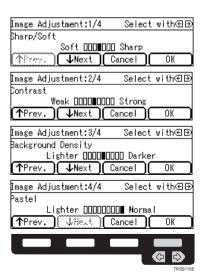


- □ To return to the default setting, select your desired function with the ♠ ► keys and press the [Default] key.
- Adjust the settings with the 🖘 keys. Then press the [OK] key.



- □ If you press the [†Prev.] or [!Next] key repeatedly, Sharp/Soft, Contrast, Background Density, and Pastel adjustment displays appear in turn.
- Press the [OK] key.

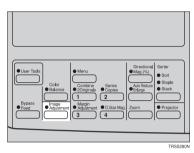




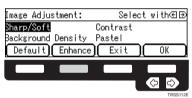
U.C.R. Adjustment, A.C.S. Sensitivity Level and Auto Separation Sensitivity Level



- Any settings you make with the U.C.R. Adjustment, A.C.S. Sensitivity Level and Auto Separation Sensitivity Level functions are not cleared by turning the power off or by pressing the [Clear Modes] key. They are cancelled only when you overwrite them with new settings.
- Press the [Image Adjustment] key.

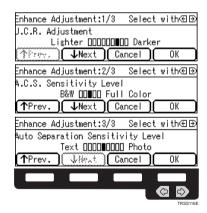


Press the [Enhance] key.



- Select your desired function with the [†Prev.] or [!Next] key.
- Adjust the settings with the

 keys.



Press the [OK] key.

Combination Chart

Combination Chart

- ☆:These modes can be used together.
- ★:These modes can be used together with some limitations.
- →: The original mode is overridden and only the newly selected mode is active.
- X: These modes cannot be used together.

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*1 20-bin sorter stapler: ☆
*2 10-bin sorter stapler: ✗
*2 20-bin sorter stapler: ✗
*10-bin sorter stapler: ✗

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What to do if Something Goes Wrong

If Your Machine Does not Operate as You Want

Check the following:

Condition	Action
Nothing happens when the operation switch is turned on.	Is the main power switch turned on? →Turn on the main power switch.
≛ Paper tray is empty.	Load paper See page 104.
Late Toner container is almost empty. Or toner container is empty.	Add toner. ► See page 106.
☐ Doors/covers are open.	Close the doors/covers.
% Misfeed occurs.	Remove misfed paper. • See page 108.
	Add staples. See page 111.
The machine instructs you to enter your user code.	The machine is set for User Code mode. Enter your user code. ► See page 13.
The Energy Saver indicator is on.	Your machine is under the energy saver condition. →Press the [Energy Saver] key. See page 44.
Misfeeds occur frequently.	Is the right kind of paper in the paper tray? →Paper size and weight must be within the specifications for this machine.
	Is folded, wrinkled, damp, or curled paper in the paper tray? →Always use dry, undamaged paper.
	Is the paper properly set in the paper tray? →Always load paper correctly.
	Are there any pieces of misfed paper or other foreign objects in the machine? →Make sure that the paper path is completely clear of paper and other material after a misfeed.
Staples do not come out at all.	There are jammed staples in the stapler. →Remove the jammed staples. ◆ See page 113.
2 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	After loading a new staple cartridge, staples might not be ejected the first few times you try to use the stapler.
or tor roll is lit.	Contact your service representative.

If you cannot correct the problem by taking the above actions, please contact your service representative.

If You Cannot Make Copies as You Want

Problem	Cause	Action
Copies appear dirty.	The image density is too dark.	Adjust the image density. See page 25.
		Adjust the background density. See page 91.
	The exposure glass (platen glass) or document feeder belt is dirty.	Clean them. See page 136.
The reverse side of an original image is copied.	The image density is too dark.	Adjust the image density. See page 25.
		If you select Black Copy mode or Single Color mode, place a black paper in the backside of the original and select Auto Image Density mode.
		Lighten the background density. See page 91.
A shadow is copied when copying a pasted original.	The image density is too dark.	Adjust the image density. See page 25.
		Adjust the background density. See page 91.
		Set the original in a different direction.
		Put mending tape on the bound part.
Copies are too light.	The original has a low contrast image.	Adjust the image density. See page 25.
	The image density is too light.	
	Damp or rough grain paper is used	Use dry paper without rough grain.
Copy image is not clear.	The original image type (Photo/ Text) is not selected properly.	Select the proper original image type. See page 31.
		Adjust the sharpness of the image with the Sharp/Soft function. See page 91.
The same copy area is dirty whenever making copies.	The exposure glass (platen glass) or document feeder belt is dirty.	Clean them. See page 136.

Problem	Cause	Action
Copies are blank or parts of the image are not copied.	The original is not set correctly.	Set the originals correctly. See page 15, 16 or 17.
	An improper paper size is selected.	Select the proper paper size.
	The selected reproduction ratio does not match the paper size.	Select the proper reproduction ratio.
A moire pattern is produced on copies as shown in the illustration.	The Text mode is selected.	Select Auto Text/Photo mode or Photo mode. • See page 31.
R	The line images of the original might be overlapped each other.	Place the original on the exposure glass (platen glass) at a slight angle.
		Adjust the sharpness of the image. See page 91.
Color tone of copies is different from that of originals.	The color balance is not set properly.	Adjust the Color Balance. See page 88.
		Perform the Auto Color Calibration. See page 132.
Color tone of copies is completely different from that of originals.	Unsuitable color setting.	Perform Auto Color Calibration. See page 132. If you cannot correct the problem by performing Auto Color Calibration, contact your service representative.
Letter parts and photo parts of an original are not separated correctly.	An original has screen letters or low density letters.	Adjust the Auto Separation Sensitivity Level to a "Text" level. See page 92.
	An original has a high contrast photo.	Adjust the Auto Separation Sensitivity Level to a "Photo" level. See page 92.
	An original has a photo having sequence thin lines with regular thin spaces.	- Gee page 32.
Color parts of an original are copied in black in Auto Color Selection mode.	There are small or thin color parts.	Adjust the A.C.S. Sensitivity Level to a "Full Color" level. See page 92.
Non-color parts of an original are copied in color in Auto Color Selection mode.	The machine might detect some black and white screen images (such as from newspaper) as a	Select Black Copy mode. See page 28.
Colonian made.	full color original.	Adjust the A.C.S. Sensitivity Level to a "B&W" level. See page 92.

Problem	Cause	Action
A copy image is blurred.	The image density is too light.	Adjust the image density. See page 25.
	An improper kind of paper is set.	Set the right kind of paper in the paper tray.
		Copies might be blurred if you copy onto rough grain, coated, or damp paper.

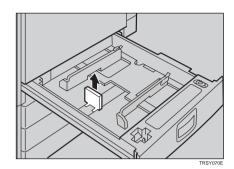
[☐] If you cannot correct the problem by taking the above actions, please contact your service representative.

≟Loading Paper

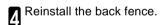
S	Reference
	Regarding paper sizes that can be set, * see page 184.
A	Note
	If you want to change the paper size, ◆ see page 116.
Ν	on-recommended Paper for Paper Trays
	Folded, curled, creased, or damaged paper
	Torn paper
	Perforated paper
▢	Paper with conductive or low electrical resistance coating such as carbon or silver coating
	Thermal paper, art paper
	Thin paper that has low stiffness
	Damp paper
	Wavy paper
	Stapled paper
	Translucent paper
	OHP transparencies
B	Note
▢	Load paper with the copy side \underline{down} in the paper trays. If copies are curled, try turning the copy paper over in the tray. If there is no improvement, change to copy paper with less curl.
	Correct curls in copy paper before loading.
	Fan copy paper to get air between the sheets before loading.
	When making two-sided copies, do not load paper in the paper tray to copy on the reverse side. Use the bypass tray. • See page 36.

Loading Paper in the Paper Tray

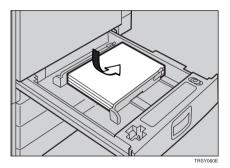
- Pull out the paper tray until it stops.
- Remove the back fence.



- Square the paper and set it in the tray.
- ☐ Shuffle the paper before setting it in the tray.
- ☐ Do not stack paper over the limit mark.
- ☐ Make sure that the leading corners of the paper are under the corners.



5 Push the paper tray in until it stops.



△Adding Toner

There are four kinds of toner (Cyan, Magenta, Yellow, and Black). When **!** is lit, it is time to add toner.

↑ WARNING:



 Do not incinerate used toner or toner containers. Toner dust might ignite when exposed to an open flame. Dispose of the used toner containers according to local regulations for plastics.

⚠ CAUTION:



- Do not eat or swallow toner.
- Keep toner (used or unused) and toner containers out of reach of children.

↑ CAUTION:



 This machine has been tested for safety using this supplier's parts and consumables. We recommend you only use these specified supplies.

Note

- ☐ If you use toner other than that recommended, a fault might occur.
- When adding toner, do not turn off the operation switch. If you do, your settings are cleared.
- Always add toner after the machine instructs you to add toner.
- Do not use used toner. This will damage the machine.
- ☐ Be sure to add the correct color toner.
- ☐ You can still make about 20 copies after 🔬 appears. This is a good time to get a new toner cartridge ready.
- Open the front cover of the machine.
- Pull the knob to unlock it, then turn it counterclockwise to the mark.



3 Gently pull out the toner container.



Hold a new toner container horizontally and shake it 5 or 6 times.



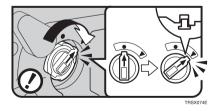
Remove the seal.



6 Insert the toner container with the ↑ mark at the top.

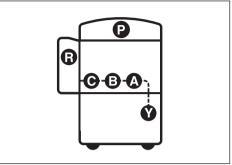


7 Turn the knob clockwise to the ▲ mark until it clicks.



Close the front cover.

%Clearing Misfeeds



TBSX083

⚠ CAUTION



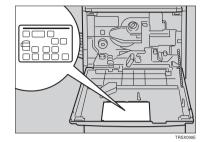
 When removing misfed paper, do not touch the fusing section because it could be very hot.



- When clearing misfeeds, do not turn off the operation switch. If you do, your copy settings are cleared.
- ☐ To prevent misfeeds, do not leave any torn scraps of paper within the machine.
- $\hfill \square$ If paper misfeeds occur repeatedly, contact your service representative.
- When clearing misfeeds, make sure that all units and levers are returned to their original position and all covers are closed.
- Do not touch originals in the document feeder when a paper misfeed occurs in the machine. If you do, the machine cannot determine which originals have been copied and which haven't.

When A, B, C or Y is Displayed:

- Open the front cover of the machine.
- 2 You can find a sticker (with % at the top) explaining how to remove misfed paper, inside the front cover as shown in the illustration.

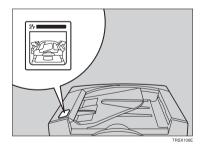


8 Remove misfed paper following the instructions on the sticker.

When P is Displayed:



- This indicator is displayed only when your machine is equipped with the document feeder.
- You can find a sticker (with ¾ at the top), explaining how to remove the misfed paper, on the document feeder as shown in the illustration.

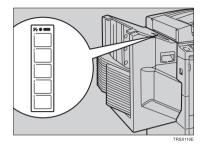


2 Remove the misfed paper following the instructions on the sticker.

When R is Displayed:

If your machine is equipped with the 20-bin sorter stapler

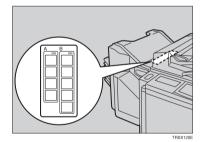
You can find a sticker (with % at the top) explaining how to remove misfed paper, on the cover of the sorter stapler as shown in the illustration.



Remove the misfed paper following the instructions on the sticker.

If your machine is equipped with the 10-bin sorter stapler

1 You can find a sticker (with ¾ at the top), explaining how to remove misfed paper, on the cover of the sorter stapler as shown in the illustration.



2 Remove the misfed paper following the instructions on the sticker.

△Adding Staples

↑ CAUTION:



• This machine has been tested for safety using this supplier's parts and consumables. We recommend you only use these specified supplies.



- ☐ If you use a staple cartridge other than that recommended, staple failure or staple jams might occur.
- Open the front cover of the sorter stapler.
- Raise the staple unit towards you.



Remove the cartridge.



Hold the new cartridge as shown in the illustration, then pull out the stopper.



☐ If the staple is coming out, press it to the proper position.



5 Reinstall the cartridge until it clicks.



Push the staple unit to the original position.



7 Close the front cover of the sorter stapler.

♣Removing Jammed Staples

Note

- Staples might be jammed because of curled copies. In this case, try turning the copy paper over in the tray. If there is no improvement, change the copy paper with less curls.
- After removing jammed staples, staples might not be ejected the first few times you try to use the stapler.
- Open the front cover of the sorter stapler.
- Raise the staple unit towards you.



Remove the cartridge.



While pushing the lock, pull the top cover.



Remove the jammed staple.



Push the top cover until it clicks.



☐ If the staple is coming out, press it to the proper position.



Reinstall the cartridge until it clicks.



Push the staple unit to the original position.



Close the front cover of the sorter stapler.

Changing the Machine's Settings

Changing Paper Size



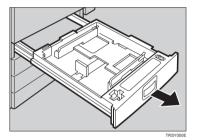
Make sure to select paper size with the user tools. Otherwise, misfeeds might occur.

Reference

- ☐ For paper sizes, weight, and capacity that can be set in each tray, see page 184 or 192.
- Make sure that the paper tray is not being used.
- Pull out the paper tray until it stops.



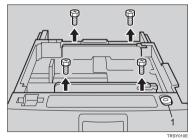
☐ Remove any remaining copy paper.



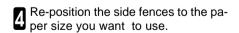
Remove the screws fastening the side fences using the screwdriver.

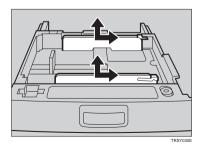


☐ A screwdriver is contained in the front area of the tray.

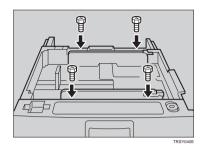


1: Screwdriver





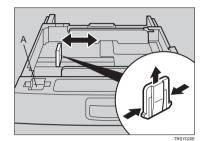
5 Fasten the fences with screws.



Adjust the back fences to the new paper size.



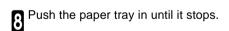
☐ For 11" × 17" paper, put the back fences inside A.

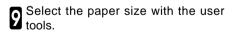


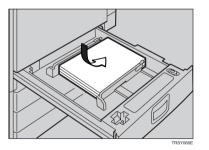
7 Square the paper and set it in the tray.



- ☐ Shuffle the paper before setting it in the tray.
- ☐ Do not stack paper over the limit mark.
- ☐ Make sure the leading corners of the paper are under the corners.

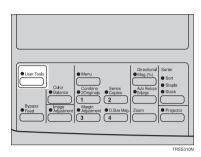




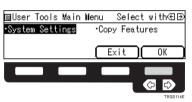


To Adjust the Paper Size with the User Tools

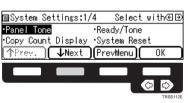
Press the [User Tools] key.



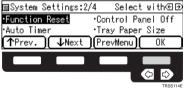
2 Make sure that [System Settings] is selected, then press the [OK] key.



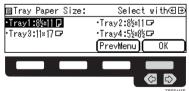
Press the [Next] key until [Tray Paper Size] is displayed.



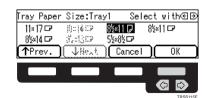
Select [Tray Paper Size] with the
Select [Tray Paper Size] with the
Select [Tray Paper Size] with the



5 Select the tray with the **⊕** keys, then press the **[OK]** key.



- Select your desired size with the ♠ keys, then press the [OK] key.
- Press the **[User Tools]** key to exit from the user tools.



User Tools

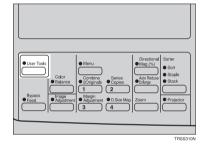
Accessing the User Tools

This section is for the key operators in charge of this machine. You can change or set the machine's default settings.

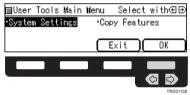


After using the tools, be sure to exit from the user tools.

Press the [User Tools] key.



2 Select [System Settings] or [Copy Features] with the ⊕ keys, then press the [OK] key.



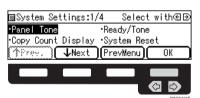
Select the desired user tools menu with the ⊕ be keys, then press the [OK] key.



- ☐ [↓Next]: Press to go to the next page.
- ☐ [¹**Prev.**]: Press to go back to the previous page.



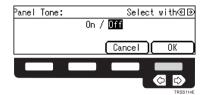
□ User tools menu,
see page 121.



Change the settings by following the instructions on the display. Then press the **[OK]** key.



- □ **[OK]** key: Press to set the new settings and return to the previous menu.
- ☐ [Cancel] key: Press to return to the previous menu without changing any data.

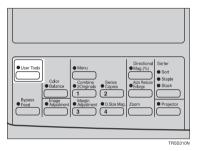


Exiting from User Tools

After changing the user tools settings, press the **[User Tools]** key.



☐ The settings are not canceled even if the operation switch is turned off or the [Clear Modes] key is pressed.



User Tools Menu

System settings

Menu		See
Panel Tone		page 124
Ready/Tone		page 124
Copy Count Display		page 124
System Reset		page 124
Function Reset		page 124
Control Panel Off		page 125
Auto Timer		page 125
Tray Paper Size		page 125
Tray Priority		page 125
Auto Tray Switch		page 125
Interleave Print		page 125
Output Tray Prio. (For 3-bin sorter only)		page 126
Display Contrast		page 126
3 Side Full Bleed		page 126
Bypass Custom Size		page 126
Key Operator Tools	Key Op. Access	page 127
	Program KeyOpCode	page 127
AOF (Keep it on.)		page 127

Copy features

	Menu		See
General Features	APS Priority		page 128
realures	ADS Priority (FC)		page 128
	ADS Prio. (B&K/SC)		page 128
	Orig. Mode Priority		page 128
	Orig. Type Priority		page 128
	Col. Mode Priority		page 128
	Photo Type (Auto)		page 129
	Photo Type (Photo)		page 129
	Copy Reset		page 129
	Max. Copy Q'ty		page 129
	Original Tone		page 129
	Margin Adjustment		page 129
	Set User Ratio		page 129
	Initial Mode Set		page 130
	Key Operator Tools	Accessible Modes	page 130
		Counter Reset	page 130
		Clear Code & Counter	page 130
		Program User Code	page 131
		Chg/Del User Code	page 131
		Counter List Print	page 131
	A.D.S. (FC)		page 132
Image Adjust-	A.D.S. (B&K/SC)		page 132
ment	A.C.S. Priority		page 132
	Color Sensitivity		page 132
	Auto Color Cal.		page 132
	IJ Printer Select		page 132

	Menu	See
ADF/	SADF Auto Reset	page 133
Sorter	Thin Paper Mode	page 133
	ADF Mixed Sizes	 page 133
	ADF Auto Paper Select	page 133
	FC Copy Sorting	page 133
	Auto Sort Mode	page 133
Set Favorite keys		 page 134
Special Modes		 page 134

Settings You can Change with the User Tools (System Settings)

Reference

☐ For how to access the user tools, see page 119.

System _{Men} tting	Description
Panel Tone	The beeper (key tone) sounds when a key is pressed. This beeper can be turned on or off.
	Ø Note
	☐ Default: On
Ready/Tone	Choose whether the machine beeps when it becomes ready for a copy run after power up.
	𝒯 Note
	☐ Default: On ☐ When the "Panel Tone" is set to Off, the beeper does not sound even if the "Ready/Tone" is set to On.
Copy Count Display	The copy counter can be set to show the number of copies made (Count Up), or the number of copies remaining to be made (Count Down).
	Ø Note
	☐ Default: Count Up
System Reset	The machine returns to its prioritized mode automatically after your job is finished, after the selected time. This function is called "System Reset". The time can be set from 10 to 990 seconds (in 10 seconds steps), or off. 1. Select [On] or [Off] with the ♠ keys. 2. When you select [On], enter the system reset time with the [Number] keys. Then press the [OK] key.
	Note
	Default: On (60 seconds)
	` `
Function Reset	How long the machine waits before switching to the default mode if no operation has been performed after an operation has finished. The time can be set from 10 to 990 seconds (in 10 seconds steps), or off. 1. Select [On] or [Off] with the ఆ keys. 2. When you select [On], enter the time with the [Number] keys. Then press the [OK] key.
	𝒯 Note
	☐ Default: On (60 seconds)

Menu	Description
Control Panel Off	The machine enters Energy Saver mode automatically after your job is finished, after the selected time. The time can be set from 10 to 990 seconds (in 10 seconds steps), or off. In Energy Saver mode, the panel display turns off.
	 Select [On] or [Off] with the ⊕ keys. When you select [On], enter the time with the [Number] keys. Then press the [OK] key.
	Ø Note
	☐ Default: On (60 seconds)
Auto Timer	The machine turns itself off automatically to conserve energy after your job is finished, after the selected time. This function called "Auto Off". The time can be set from 1 to 120 minutes.
	Ø Note
	☐ Default: 60 minutes
Tray Paper Size	Select the size of the copy paper set in the paper tray.
	Ø Note
	If the specified paper size differs from the size of paper actually set in the paper tray, a paper misfeed might occur because the paper size is not detected correctly.
	₽ Reference
	For details, • see page 118.
Tray Priority	You can select the paper tray which will be selected as a default in the following conditions: • When the main power switch or operation switch is turned on. • When System Reset or Auto Reset mode is turned on. • When the [Clear Modes] key is pressed. • When the Auto Paper Select mode is not selected.
	Ø Note
	☐ Default: Tray 1 ☐ Tray 2, Tray 3, and Tray 4 are options.
Auto Tray Switch	If you load paper of the same size in two or more trays, the machine automatically shifts another tray when the tray in use runs out of paper. You can set or cancel this setting.
	Ø Note
	□ Default: Off
Interleave Print	By default, you can make the interrupt copies. You can cancel this setting.
	Ø Note
	☐ Default: On

Menu	Description					
Output Tray Prio. (For 3-bin sorter only)	You can specify a bin to which documents are delivered for each feature (copy and printer). 1. Select [Copy] or [Printer] with the ♠ keys. Then press the [OK] key. 2. Select a bin with the ♠ keys. Then press the [OK] key. Note □ Default: Copy: First bin Printer: First bin					
Display Contrast	You can adjust the brightness of the panel display. Note Default: level 4					
3 Side Full Bleed	When this mode is off, narrow margins on all 4 sides of the original are not copied. 1: 2±2mm, 0.08"±0.08" 2: 2±2/-1.5mm, 0.08"+0.08"/-0.06" 3: 2±2mm, 0.08"±0.08" 4: 5±2mm, 0.2"±0.08" When you turn it on, margins 1, 2 and 3 are copied. Note Default: Off You cannot cancel the leading edge margin (margin 4).					
Bypass Custom Size	You can register the non-standard size paper when you make copies with the bypass tray. 1. Select [Custom1], [Custom2], or [Custom3] with the ⊕ keys. 2. Press the [OK] key. 3. Enter the vertical size with the [Number] keys, then press the [#] key. 4. Enter the horizontal size with the [Number] keys, then press the [OK] key. Note Adjustment value: Metric version: Vertical: 100 - 305mm Horizontal: 140 - 457mm Inch version: Vertical: 3.9" - 12.0" Horizontal: 5.5" - 18.0" □ To clear the custom paper size, select the [Delete] key.					
Key Operator Tools						
Use these tools to man	age use of the machine.					
Ø Note						
	☐ Enter a previously registered key operator code with the [Number] keys.					
Reference						
About the key operator code, see page 127.						

Menu	Description			
Key Op. Access	If you select "On", only operators who know the key operator code can access the "Key Operator Tools" in the System Settings and Copy Features.			
	Ø Note			
	☐ Default: Off ☐ If you select "On", you should register the key operator code.			
Program KeyOpCode	Use to register or change the key operator code (up to 8 digits).			
AOF (Keep it on.)	Ø Note			
	☐ For details about this function, contact your service representative.			

Settings You can Change with the User Tools (Copy Features)

Reference

☐ For how to access the user tools, see page 119.

General Features

Menu	Description			
APS Priority	As a default setting, the Auto Paper Select is selected just after the machine is turned on or when modes are cleared. You can cancel this setting. Note Default: On			
ADS Priority (FC)	As a default setting, the Manual Image Density is selected in Full Color mode just after the machine is turned on or when modes are cleared. You can cancel this setting so that the Auto Image Desity is selected. Note Default: Off			
ADS Prio. (B&K/SC)	As a default setting, the Auto Image Density is selected in Black, Single Color, and Twin Color mode just after the machine is turned on or when modes are cleared. You can cancel this setting. Note Default: On			
Orig. Mode Priority	You can select the original image type (Auto Text/Photo mode, Text mode, Photo mode, or Special Original mode) that is selected automatically just after the machine is turned on or when modes are cleared. Note Default: Auto Text/Photo mode			
Orig. Type Priority	You can select the special original type (Marker Pen, Inkjet, or Map) that is selected automatically just after the machine is turned on or when modes are cleared. Note Default: Marker Pen			
Col. Mode Priority You can select the color mode (Auto Color Selection mode, Ful or Black mode) that is selected automatically just after the mac on or when modes are cleared. Note Default: Auto Color Select				

Menu	Description			
Photo Type (Auto)	You can select the photo type (Press Print, Glossy Photo, or 2nd Generation) in Auto Text/Photo mode that is selected automatically just after the machine is tured on or when modes are cleared.			
	✓ Note□ Default: Press Print			
Photo Type (Photo)	You can select the photo type (Press Print, Glossy Photo, or 2nd Getion) in Photo mode that is selected automatically just after the mach turned on or when modes are cleared.			
				
Copy Reset	The machine returns to its initial condition automatically after your job is finished. The time can be set from 10 to 300 seconds, or off. 1. Select [On] or [Off] with the ♠ keys. 2. When you select [On], enter the time with the [Number] keys. Then press the [OK] key.			
	✓ Note□ Default: 60 seconds			
Max. Copy Q'ty	The maximum copy quantity can be set from 1 to 99. Note Default: 99			
Original Tone	The beeper (key tone) sounds when you forgot to remove originals after copying. Note Default: On When the "Panel Tone" is set to Off, the beeper does not sound even			
Margin Adjustment	if the "Original Tone" is set to On. You can adjust the margin width that is selected as a default in Margin Adjust mode. You can change this setting as follows: 1. Select the margin direction with the ♠ keys. 2. Enter the margin width with the the [Number] keys. Then press the [OK] key. • Metric version: left/20mm - right/20mm in 1mm steps • Inch version: left/0.8" - right/0.8" in 0.1" steps • Note □ Default:			
	Metric version: left/10mm Inch version: left/0.4"			
Set User Ratio	Up to 2 reproduction ratios which you frequently use can be registered. 1. Select [Ratio 1] or [Ratio 2] with the ⊕⊕ keys. 2. Enter your desired ratio with the [Number] keys. Then press the [OK] key. ✔ Note			
	Default: 100 %			

Menu	Description					
Initial Mode Set	You can set the machine to recall program setting when the machine is turned on or when modes are cleared.					
	𝒯 Note					
	□ Default: Normal					
	 Your service representative can store the program setting. Your service representative can select whether the program setting recalled when the machine is turned on or when modes are cleare 					
Key Operator Tools						
Use these tools to man	age use of the machine.					
Ø Note						
☐ Enter a previously re	egistered key operator code with the [Number] keys.					
Reference						
About the key operator code, ≠ see page 127.						
Accessible Modes	You can assign user codes to each color mode. Operators must input their user codes before using each color mode (Full Color, Black, Single Color, and Twin Color). The machine keeps count of the number of copies made under each user code. 1. Select your desired color mode with the ♠ keys. 2. Press the [Select] key. 3. Press the [Exit] key.					
	☐ Repeat steps 1 and 2 until you finished designating color modes.					
Counter Reset	You can check the number of copies made using each user code. Also, you can clear each code's counter. 1. Input user code you want to check its number of copies with the [Number] keys. 2. Press the [OK] key.					
	Ø Note					
	 You can check the number of copies. To clear the counter, press the [Reset] key. Then press the [Yes] key. 					
	3. Press the [Exit] key.					
Clear Code & Counter	You can reset the counter for all user codes and delete all user codes. 1. Select [User Code] to delete all user codes or [Counter] to reset the counter for all user codes with the ఆ keys. 2. Press the [Yes] key. 3. Press the [Exit] key.					

Menu	Description			
Program User Code	You can register your user code (8 digits). 1. Input your desired user code with the [Number] keys. 2. Press the [OK] key. 3. Select the color mode you want to use with the new code with the eys. 4. Press the [Select] key. 5. Press the [Exit] key. Note			
	Repeat steps 3 and 4 until you finished designating color modes.Up to 50 user codes can be registered.			
Chg/Del User Code	You can change or delete your user code or the color mode you assign your user code. Changing your user code			
	 Input user code you want to change with the [Number] keys. Then press the [#] key. Press the [Change] key. Input new user code with the [Number] keys. Press the [OK] key. Select the color mode you want to use with the new code with the €. Press the [Select] key. Press the [Exit] key. 			
	 Ø Note □ Repeat steps 5 and 6 until you finished designating color modes. 			
	Deleting your user code 1. Input user code you want to delete with the [Number] keys. Then press the [#] key. 2. Press the [Delete] key. 3. Press the [Yes] key. Note The number of copies made under the deleted code is also deleted.			
Counter List Print	You can print data for all user codes.			

Image Adjustment

Menu	Description				
A.D.S. (FC)	The Auto Image Density levels in Full Color mode can be made lighter or darker (5 levels). Note				
	□ Default: level 3				
A.D.S. (B&K/SC)	The Auto Image Density levels in Black mode, Single Color mode, or Color mode can be made lighter or darker (5 levels). Note				
	Default: level 3				
A.C.S. Priority	You can select color images or black & white images that are priority of tected in Auto Color Selection mode.				
	Note Refer to the Full Colors				
	Default: Full Color				
Color Sensitivity	When in Color Erase or Color Conversion mode, the function can be made more or less sensitive to the color to be erased or converted. It can be adjusted within 5 levels ("Narrow" to "Wide"). For example, if red is selected as the color to be erased or converted, "Narrow" will result in only red being erased or converted, and "Wide" will result in other colors close to red being erased or converted.				
	Ø Note				
	☐ Default: level 3				
Auto Color Cal.	When the tone of a specific color is strong or the color tone of copies is different from that of originals, perform this function. This function adjusts the balance of the 4 basic colors. 1. If your machine has the printer option installed, select [Copy Mode] or [Printer Mode] with the ⊕ keys. Then press the [OK] key. 2. Make sure that A4 □, 81/2" × 11" □, B4 □, A3 □, or 11" × 17" □ is set in trays. Then press the [Print] key.				
	Ø Note				
	☐ The test pattern is delivered to the copy tray.				
	Set the test pattern on the exposure glass (platen glass). Then press the [Scan] key.				
	₹ Limitation				
	☐ You cannot set the test pattern in the document feeder.				
	Ø Note				
	☐ To return to the previous setting, repeat steps 1 to 3 and press the [Previous] key.				
IJ Printer Select	You can select the type of inkjet printer if your originals are printed with inkjet printer.				
	Ø Note				
	□ Default: 1				

ADF/Sorter

SADF Auto Reset When you set one original at a time in the document feeder, the Auto Feed indicator lights for a selected time after an original is fed to show that the document feeder is ready for another original. The time can be set from 1 second to 99 seconds. Note Default: 5 seconds Use when changing the type of originals to be fed. Select this function to avoid damaging thin originals (40 - 52g/m², 11-14 lb) set in the document feeder. Note Default: Off ADF Mixed Sizes By default, you cannot set originals of different sizes at one time in the document feeder. You can cancel this setting. Note Default: Off If you select [On], the copying speed will be reduced. When setting different length originals, all originals must be flush with the back fence of the document feeder. Smaller size originals might be skewed a little. ADF Auto Paper Select By default, the Auto Paper Select is selected when you set originals in the document feeder. You can cancel this setting.
Thin Paper Mode Use when changing the type of originals to be fed. Select this function to avoid damaging thin originals (40 - 52g/m², 11-14 lb) set in the document feeder. Note Default: Off By default, you cannot set originals of different sizes at one time in the document feeder. You can cancel this setting. Note Default: Off If you select [On], the copying speed will be reduced. When setting different length originals, all originals must be flush with the back fence of the document feeder. Smaller size originals might be skewed a little. ADF Auto Paper Select By default, the Auto Paper Select is selected when you set originals in the document feeder. You can cancel this setting.
Thin Paper Mode Use when changing the type of originals to be fed. Select this function to avoid damaging thin originals (40 - 52g/m², 11-14 lb) set in the document feeder. Note Default: Off By default, you cannot set originals of different sizes at one time in the document feeder. You can cancel this setting. Note Default: Off If you select [On], the copying speed will be reduced. When setting different length originals, all originals must be flush with the back fence of the document feeder. Smaller size originals might be skewed a little. ADF Auto Paper Select By default, the Auto Paper Select is selected when you set originals in the document feeder. You can cancel this setting.
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□ Default: Off □ If you select [On], the copying speed will be reduced. □ When setting different length originals, all originals must be flush with the back fence of the document feeder. □ Smaller size originals might be skewed a little. ADF Auto Paper Select By default, the Auto Paper Select is selected when you set originals in the document feeder. You can cancel this setting.
☐ If you select [On], the copying speed will be reduced. ☐ When setting different length originals, all originals must be flush with the back fence of the document feeder. ☐ Smaller size originals might be skewed a little. ADF Auto Paper Select By default, the Auto Paper Select is selected when you set originals in the document feeder. You can cancel this setting.
Select document feeder. You can cancel this setting.
A
❷ Note
☐ Default: On
FC Copy Sorting You can disable sorting, stacking, or stapling in Full Color mode to maximize quality of full color copies.
Ø Note
 Default: Available (Sorting, stacking, or stapling can be used in Full Color mode.)
Auto Sort Mode You can have the machine select Sort mode automatically when you insert two or more originals in the document feeder and make two or more copies from each original.
Ø Note
☐ Default: On

Set Favorite Keys

You can register up to 4 frequently used functions in [Favorite] keys.

- 1. Press the [Favorite] key you want to store the function.
- 2. Select the function you want to store with the <a>® keys.
- 3. Press the [OK] key.

Note

- ☐ Default: 1: Combine 2 Originals
 - 2: Series Copies
 - 3: Margin Adjustment
 - 4: Directional Size Magnification (inch)
- ☐ You can check the functions that are registered in the [Favorite] keys with the [Status] key.

Special Modes

Use to recall the special modes set by your service representative.

Note

- □ Default: Off
- ☐ The special modes are set by your service representative. If you want to use this function, contact your service representative.

Maintaining Your Machine Where to Put Your Machine Do's and Don'ts Remarks Use and Storage of Supplies

Maintaining Your Machine

If the exposure glass (platen glass), platen cover or document feeder belt is dirty, you might not be able to make copies as you want. Clean them if you find them dirty.

Note

- Wipe the machine with a soft, damp cloth. Then wipe it with a dry cloth to remove water.
- ☐ Do not use chemical cleaner or organic solvent, such as thinner or benzene. If they get into the machine or melt plastic parts, a failure might occur.
- ☐ Do not clean parts other than those specified in this manual. Such parts should be cleaned by your service representative.

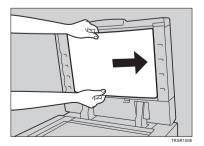
Exposure Glass (Platen Glass)



Platen Cover



Document Feeder



Other

Where to Put Your Machine

Machine Environment

Your machine's location should be carefully chosen because environmental conditions greatly affect its performance.

Optimum environmental conditions



- Keep the machine away from humidity and dust. A fire or an electric shock might occur.
- Do not place the machine on an unstable or tilted surface. If it topples over, it cause injury.



 If you use the machine in a confined space, make sure there is a continuous air turnover.

Temperature: 10 – 32°C, 50 – 89.6°F (hun	nidity to be 54% at 32° C, 89.6° F
--	---

- ☐ Humidity: 15 80% (temperature to be 27°C, 80.6°F at 80%)
- A strong and level base.
- ☐ The machine must be level within 5mm, 0.2" both front to rear and left to right.
- ☐ To avoid possible build-up ozone, make sure to locate this machine in a large well ventilated room that has an air turnover of more than 30m³/hr/person.

Environments to avoid

Locations expos	ed to direct	sunlight or	strong light	(more than	2,000 lux).

- □ Locations directly exposed to cool air from an air conditioner or heated air from a heater. (Sudden temperature changes might cause condensation within the machine.)
- ☐ Places where the machine might be subjected to frequent strong vibration.
- Dusty areas.
- □ Areas with corrosive gases.

Power Connection

WARNING:



 Only connect the machine to the power source described on the inside front cover of this manual.

WARNING:



- Avoid multi-wiring.
- Do not damage, break or make any modifications to the power cord.
 Do not place heavy objects on it, pull it hard or bend it more than necessary. These actions could cause an electric shock or fire.
- Do not plug or unplug the power cord with your hands wet. Otherwise, an electric shock might occur.



 Make sure the wall outlet is near the machine and freely accessible so that in event of an emergency it can be unplugged easily.

↑ CAUTION:



- When you move the machine, unplug the power cord from the wall outlet to avoid fire or electric shock.
- When the machine will not be used for a long time, unplug the power cord.

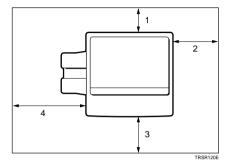
⚠ CAUTION:



- When you pull out the plug from the socket, grip the plug to avoid damaging the cord and causing fire or electric shock.
- When the main power switch is in the Stand-by positions, the optional anti-condensation heaters are on. In case of emergency, unplug the machine's power cord.
- When you unplug the power cord, the anti-condensation heaters turn off.
- Make sure the plug is firmly inserted in the outlet.
- Voltage must not fluctuate more than 10%.

Access to Machine

Place the machine near the power source, providing clearance as shown.



1. Rear: more than 10cm, 4.0"
2. Right: more than 37cm, 14.6"
3. Front: more than 70cm, 27.6"
4. Left: more than 40cm, 15.8"



☐ For the required space when options are installed, please contact your service representative.

Do's and Don'ts

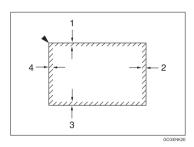


- When you move the machine, unplug the power cord from the wall outlet to avoid fire or electric shock.
- When the machine will not be used for a long time, unplug the power cord.
- Do not touch areas on or around the fusing unit. These areas get hot.
- After making copies continuously, you might feel the exposure glass is heated. But this is not a malfunction.
- You might feel warm around the ventilation hole. This is caused by exhaust air, and not a malfunction.
- Do not turn off the operation switch while copying. When turning off the operation switch, make sure that copying is completed.
- The machine might fail to produce good copy images if there should occur condensation inside caused by temperature change.
- Do not open the covers of machine while copying. If you do, misfeeds might occur.
- Do not move the machine while copying.
- If you operate the machine improperly or a failure occurs on the machine, your machine settings might be lost. Be sure to take a note of your machine settings.
- Supplier shall not be liable for any loss or damages resulting from a failure on the machine, loss of machine settings, and use of the machine.

Remarks

Copier

- When copying from a colored original, the copier will scan the original 4 times for one copy. Be careful not to move the original during the scanning process. If the original is moved slightly, the colors (Cyan, Magenta, Yellow, and Black) might not combine properly.
- ☐ To avoid problems caused by curled copies, try turning over the paper stack in the paper tray. If there is no improvement, change to copy paper with less curl.
- ☐ Load paper with the copy side <u>down</u> in the paper trays. If copies are curled, try turning the copy paper over in the tray. If there is no improvement, change to copy paper with less curl.
- As a default setting, narrow margins on all four sides will not be copied as shown in the illustration.



- 1: 2±2mm, 0.08"±0.08"
- 2: 2+2/-1.5mm, 0.08"+0.08"/-0.06"
- 3: 2±2mm, 0.08"±0.08"
- 4: 5±2mm, 0.2"±0.08"

Use and Storage of Supplies

Copy Paper

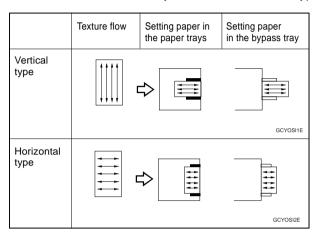
- Copy paper of the types or in the conditions listed below are not recommended for this copier.
 - Folded, curled, creased, or damaged paper

reverse side. Use the bypass tray. See page 36.

- Torn paper
- · Perforated paper
- Paper with conductive or low electrical resistance coating such as carbon or silver coating
- Thermal paper, art paper
- · Thin paper that has low stiffness
- Damp paper
- Wavy paper
- Stapled paper
- Translucent paper

Fan copy paper and OHP transparencies to get air between the sheets before loading.
Do not touch copy paper if your fingers are wet or oily; finger prints may appear on the copy.
Load paper with the copy side down in the paper trays. If copies are curled, try turning the copy paper over in the tray. If there is no improvement, change to copy paper with less curl.
When copying on rough surface paper, the copy image may be light.
When making two-sided copies, do not load paper in the paper tray to copy the

□ When setting paper thinner than 64g/m², 17 lb or translucent paper in the paper trays or bypass trays, set it as shown in the figure below. The paper is divided into the vertical and horizontal types depending on the texture flow direction. If you set thin paper or translucent paper in the reverse direction, a paper jam might occur. Since A3, B4, 11" × 17", and 81/2" × 14" sizes of thin paper are set in the lengthwise direction in this machine, they must be of the vertical type.



Paper Storage

Paper should always be stored properly. Improperly stored paper might result in poor image reproduction, creased copies, and paper misfeeds. Generally, avoid curling and absorption of moisture.

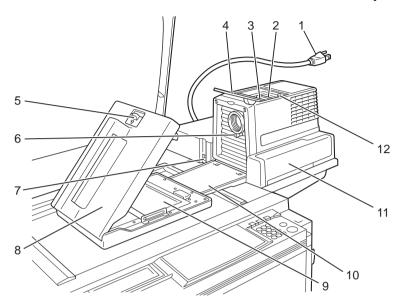
- ☐ Avoid storing paper in humid areas. Under high temperature and high humidity, or low temperature and low humidity conditions, store paper in a vinyl bag.
- ☐ Do not store paper where it will be exposed to heat.
- Store on a flat surface.
- Use older stock first.
- Do not lay heavy objects on paper.
- Keep open reams of paper in the package, and store as you would unopened paper.

Toner Storage

- ☐ Store in a cool, dark place.
- ☐ Never store toner where it will be exposed to heat.
- Do not lay heavy objects on toner container.

Projector Unit Operation

Guide to Components



TRSR0A0E

1. Power cord

Plug the power cord into a wall outlet.

2. Holder slot

Set the holder here.

3. Filter slot

Insert the P or N filter here.

4. Film cover

To protect the slots from dust, close it when you are not using the projector.

5. Mirror unit release lever

Slide this to the left when opening the mirror unit.

6. Focusing lever

Adjusting the focus with this lever when you make copies from a glass mount film.

7. Power switch

Switches the power on or off.

8. Mirror unit

Reflects the light from the projector to the copier.

9. Fresnel lens

Pull this up when setting film on the exposure glass.

10. Lens cover

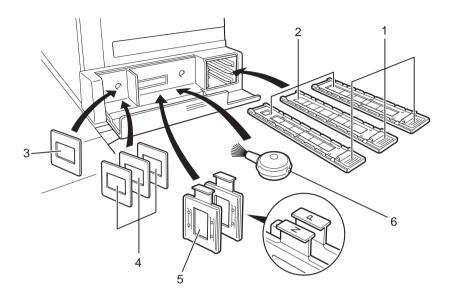
To protect the lens from dust, close it when you are not using the projector.

11. Accessory box

Accessories should be stored here.

12. Holder lever

Use to set the holder into the holder slot.



TRSR0B0E

1. Lock levers

Use to fix the film after setting it in the holder.

2. Film holders

Set 35 mm film in one of these holders.

- Slide holder: Set mounted positive films in this holder. (This holder is covered with glass.)
- Film strip holder: Set negative or positive strip film and base film here.
- Glass mount film holder: Set the positive glass mount films in this holder. (This
 holder is covered with glass.)

3. Slide mount

Use to make a base film slide.

4. Base film slides

Use them when performing shading with Nagative film.

5. Filters (P = Positive, N = Negative)

One of them should be set in the filter slot.

6. Blower brush

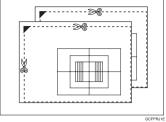
Use to clean the lens or glass.

Film position sheet

Use a duplicate of this sheet to place the film in the correct position on the exposure glass.

Make a copy from the original sheet, cut around the surrounding margin on the dotted lines, and cut away the center part corresponding to the size of the film to be copied.

Keep the original film position sheet.



Before Operating the Projector

Available Films and Setting

Setting location Film type/size	Slide film holder	Slide strip holder	Glass mount film Holder	Exposure glass (platen glass)
35mm mount film	0	×	x	×
35mm glass mount film	×	×	0	×
35mm strip film	×	0	×	0
60 × 45mm	×	×	×	0
60 × 60mm	×	×	×	0
60 × 70mm	×	×	×	0
60 × 80mm	×	×	×	0
60 × 90mm	×	×	×	0
6 × 6cm	×	×	×	0
4" × 5" (101.6 × 127mm)	×	×	×	0
Maximum size (140 × 210mm, 5.5" × 8.2")	×	х	х	0

Note

- ☐ Do not use the same film for more than 30 minutes.
- ☐ Do not store film in rooms where the temperature is more than 30°C, 86°F.
- ☐ For valuable images, we recommend copying from duplicates.
- ☐ When using a film strip, be sure to take it out from the film protection sheet.

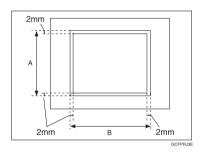
About Copying

When setting mount films and strip films in the film holders

	Mount films (using the slide holder)	Strip films (using the film strip holder)		
Area of film that can be copied	21.5mm 0.8" - 33mm - 1	23mm 0.9° 		
Copy size (copying full size)	124mm 4.8" — 195mm — 7.6"	133mm 52" 		

When setting wide films with the film position sheets

Narrow margins on all four sides will not be copied as shown in the illustration.



Film size	А	В	
60 × 45mm	61.3mm	48mm	
60 × 60mm	61.3mm	64mm	
60 × 70mm	61.3mm	77mm	
60 × 80mm	61.3mm	84mm	
60 × 90mm	61.3mm	93mm	
4" × 5"	99.6mm	125mm	
Maximum	142mm	210mm	

Notes for Operation

	film. This way, the projector can adjust the light intensity automatically while copying.
	If you press the [Clear Modes] key or [Cancel] key while using Projector function all operations with the Projector will be canceled.
	You can adjust the color tone and color density manually.
	This projector has an automatic focus function, but if you use the glass mount film holder, adjust the focus manually.
	Do not forget to turn off the power switch of the projector when you are not using it.
	Do not obstruct the light path from the projector. If the light path is obstructed, the image might not match the original.
□	This shading adjustment is very sensitive, so after the shading operation the mirror unit must be left perfectly still. Do not move it or allow vibrations to interfere with it. If this happens during copying, lines might appear on the copy. In that case, you must perform shading again.
	If you need to open and close the doors (to clear a jam or add toner), we recommend that you perform shading again afterwards.
	Avoid multi-wiring.

How to Copy from Film

The outline procedure for making copies is given below. Refer to the rest of this section for details of each step.

1 Position the projector. See page 153.



2 Prepare the film. - See page 154.





4 Adjust color, density, and focus. See page 171.



5 Select modes. See page 175.



6 Press the [Start] key.

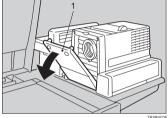


7 Choose next job. See page 176.

Positioning the Projector



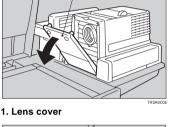
- Do not touch the fresnel lens or the glass on the mirror unit. Fingerprints or dirty parts might appear on the copy. If the fresnel lens becomes dirty, wipe it. - See page 180.
- Plug the projector into the wall outlet.
- Turn on the main switch of the projec-
- 3 Lift the platen cover or the ducument feeder and lower the projector lens cover.

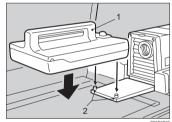


Place the mirror unit so that the unit's position holes fit over the projector's positioning pins.

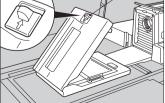


- Please be careful not to scratch the exposure glass when setting the mirror unit on it.
- Slide the mirror unit release lever in the direction of the arrow and open the mirror unit cover.





- 1. Mirror unit 2. Positioning pins



1. Mirror unit release lever

Preparing the Film

Check this table to find out the key you should use for your film type.

Film Type		Filter	Base Film	Positioning Sheet	Holder	Key To Select	
	Positive	Slide (Mount)	"P" (Positive Filter)	×	×	Slide Holder	Positive - 35mm
35mm		Slide (Glass Mount)	"P" (Positive Filter)	×	×	Glass Mount Film Holder	Positive - 35mm
		Strip Film	"P" (Positive Filter)	×	×	Film Strip Holder	Positive - 35mm
	Negative	Strip Film	"N" (Negative Filter)	0	×	Film Strip Holder	Negative - 35mm
Others Max. Size:	Positive		"P" (Positive Filter)	×	0	X (Place on the exposure glass)	Positive - Special sizes
142 × 210mm 5.5" × 8.2	Negative		"N" (Negative Filter)	0	0	X (Place on the exposure glass)	Negative - Special sizes



- ☐ When performing shading, you must set a filter that matches that type of film you will copy.
- $\hfill\Box$ Use an "N" filter for Negative films and a "P" filter for Positive films.

Selecting the Base Film (If Needed)

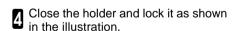
- When you use negative film for copying, use that film's appropriate base film for shading.
- Confirm the manufacture, model name, and ASA rating of the film you want to use.
- **2** Select a base film suitable for the film to copy.

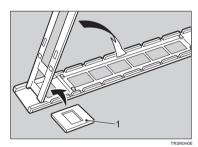
Note

- ☐ The following base film slides have been prepared as accessories.
 - For FUJICOLOR (registered trademark of FUJI PHOTO COMPANY LIMITED.)
 - For AGFA (registered trademark of AGFAGEVAERT AG.)
 - For KODAK (registered trademark of EASTMAN KODAK COMPANY.)
- ☐ If you use film that does not have suitable base film, you should make the base film yourself. See page 178.
- Open the film strip holder and set the base film in the film strip holder.



- ☐ The base film must be set sideways in the strip holder.
- ☐ There is no difference between both sides of the base film.





1: Base film

Setting Films in the Holder (If Needed)

Check which type of holder you should use. See page 154.

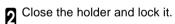
Slide Holder/Glass Mount Film Holder

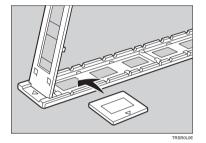


- ☐ The slide holder is covered with glass. Set the mount films in the slide holder.
- ☐ The glass mount film holder is not covered with the glass. Set the glass mount films (covered by glass) in the glass mount film holder.
- ☐ Positive films are usually set in a slide mount or glass mount. If you use positive film not set in a mount, set it in the film strip holder. See below.
- Open the cover of the slide holder or glass mount film holder, and set the slides in the holder one by one.



- Set the front side of the film face down when setting in the slide holder or glass mount film holder.
- When setting in the slide holder, make sure that all slides are aligned with the glass of the slide holder cover.





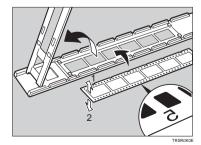
Film Strip Holder

Note

- Negative film usually come in stripes.
- Follow this procedure for positive strip film as well.
- Open the film strip holder. Put the front side of the film face down and set it in the film strip holder.



When setting film, leave the base film in the film strip holder. This is convenient when performing shading again.

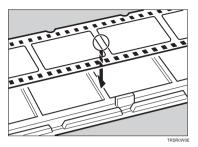


- 1. Back
- 2. Front

Adjust the position of the film.



Do not touch the image parts of the film when adjusting.

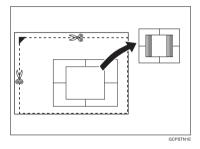


Close the film strip holder and lock it .

Cutting the Film Position Sheet (If Needed)

If you do not use the holders and position the film on the exposure glass, a positioning sheet is required.

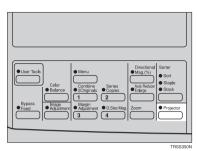
Make a copy of one of the positioning sheet originals and use it to make your own sheet. Cut a hole the size of the film from the center of the copy, then crop the sheet by cutting around the dotted lines.



Selecting the Film Type and Perform Shading

The procedures are different depending on the type of film.

Press the [Projector] key.

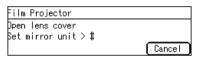


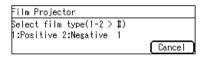
Position the projector, then press the [#] key.



- □ Positioning the projector, see page 153.
- Select the film type with the **[Number]** keys, then press the **[#]** key.
- Select the film size with the [Number] keys, then press the [#] key.
- Follow the shading procedure appropriate to your film type see below.

Film type	Film size	Go to page
Positive	35mm Page 159.	
	Special Sizes	Page 161.
Negative	35mm	Page 164.
	Special Sizes Page 167.	





```
Film Projector
[Positive] (1-2 > #)
1:35mm 2:Special Sizes 1
| Cancel
```

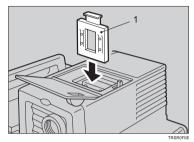
Positive—35mm (Slide Holder/Mount Film Holder/Film Strip Holder)

Open the film cover and insert the "P" (Positive) filter firmly in the left slot as shown in the illustration. Then press the [#] key.



- Be careful to insert the filter as shown, not the other way around.
- Before going to the next step, make sure that fresnel lens is lowered in position.





1. Filter

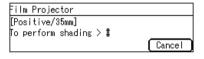
7 To perform shading, press the [#] key.

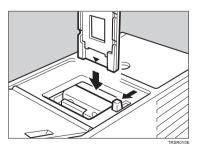


- The machine will start shading automatically.
- 3 Set the film (slide or strip) in the holder.

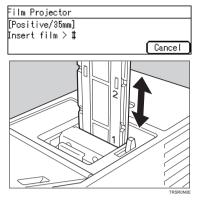


- □ Regarding setting the film, resee page 156.
- While pressing the holder lever to the left, insert the holder in the right slot.





Adjust the holder by sliding it up and down to position the correct frame for copying. Then press the [#] key.



- If needed, adjust the color, density, or focus.
- Reference
- ☐ For details,

 see page 171.
- 7 If needed, select the copier modes.
- Reference
- ☐ For details,

 see page 175.
- Press the [Start] key.
- Choose your next job.
- Reference
- ☐ For details, see page 176.

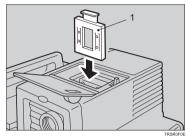
Positive—Special Sizes

Insert the "P" (Positive filter) in the left slot as shown in the illustration. Then press the [#] key.



Be careful to insert the filter as shown, not the other way around.





1: Filter

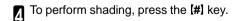
2 Cut the positioning sheet to match the film size.

Reference

- Regarding the positioning sheet, See page 157.
- Place the positioning sheet under the mirror unit (on the exposure glass). Then press the [#] key.

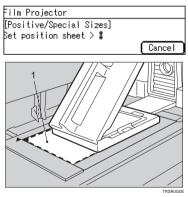


- Place the marked corner of the film position sheet at the rear left corner of the exposure glass.
- Before going to the next step, make sure that the fresnel lens is lowered in position.





The machine will start shading automatically.



1. Positioning sheet



Select the film size (1 - 8) using the [Number] keys. Then press the [#] key.

No.	Film Size
1	60 × 45mm
2	60 × 60mm
3	60 × 70mm
4	60 × 80mm
5	60 × 90mm
6	6 × 6cm
7	4" × 5" (101.6 × 127mm)
8	Maximum size
	(142 \times 210mm or 5.5" \times 8.2")

Film Projector
[Positive/Special Sizes](1-8 > #)
1:80x45mm

Cancel

Lift the fresnel lens, place the film inside the film position sheet, and lower the fresnel lens. Then press the [#] key.



- Place the film face down.
- If the film is curled, the copy image might be out of focus. In this case, make the cutout film position sheet a little smaller than the film size and use it to hold the film down.
- If needed, adjust the color, density, or focus.



- ☐ For details,

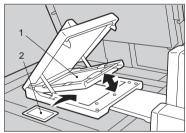
 see page 171.
- A If needed, select the copier modes.



☐ For details,

see page 175.





- 1. Fresnel lens
- 2. Film

- Press the [Start] key.
- Choose your next job.
- Reference
- ☐ For details, see page 176.

Negative—35mm (Film Strip Holder)

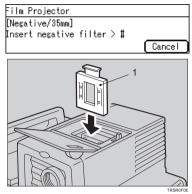
Insert the "N" (Negative) filter in the left slot as shown in the illustration. Then press the [#] key.



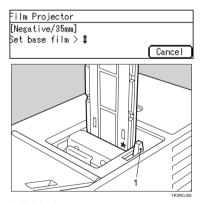
- Be careful to insert the filter as shown, not the other way around.
- Before going to the next step, make sure that the fresnel lens is lowered in position.
- 2 Set the base film in the holder.



- □ Regarding setting the base film, * see page 155.
- Open the film cover and while pressing the holder lever to the left, insert film strip holder the right slot.
- Insert the holder until the ★ mark is placed as shown in the illustration. Then press the [#] key.



1: Filter



1: Holder lever

Film Projector	
[Negative/35mm]	
To perform shading > #	
	(Cancel

To perform shading, press the [#] key.

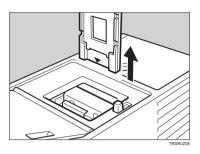


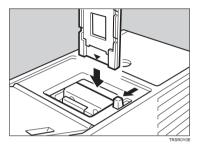
The machine will start shading automatically.

- Pull out the film strip holder with the base film.
- Set the film in the holder.

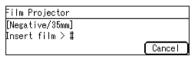
Reference

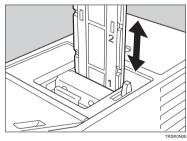
- ☐ Regarding setting the film, see page 156.
- While pressing the holder lever to the left, insert the holder in the right slot.





Adjust the holder by sliding it up and down to position the correct frame for copying. Then press the [#] key.





If needed, adjust the color, density, or focus.

Reference

☐ For details,

see page 171.

If needed, select the copier modes.

☐ For details,

see page 175.

Press the [Start] key.

Choose your next job.

☐ For details,

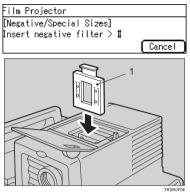
see page 176.

Negative—Special Sizes

Insert the "N" (Negative) filter in the left slot as shown in the illustration. Then press the [#] key.



Be careful to insert the filter as shown, not the other way around.



1: Filter

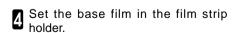
2 Cut the positioning sheet to match the film size.

Reference

- Regarding the positioning sheet, see page 157.
- Place the positioning sheet under the mirror unit (on the exposure glass). Then press the [#] key.

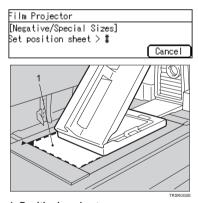


- Place the marked corner of the film position sheet at the rear left corner of the exposure glass.
- Before going to the next step, make sure that the fresnel lens is lowered in position.



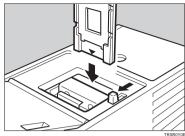


☐ Regarding setting the base film, see page 155.



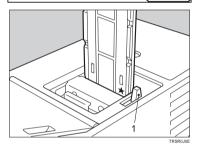
1. Positioning sheet

Open the film cover and while pressing the holder lever to the left, insert the film strip holder in the right slot.



Insert the holder until the ★ mark is placed as shown in the illustration. Then press the [#] key.

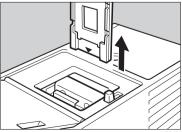




- 7 To perform shading, press the [#] key.
- ☐ The machine will start shading.
- Pull out the film strip holder with the base film. Then press the [#] key.







Select the film size (1 - 8) using the [Number] keys. Then press the [#] key.

No.	Film Size
1	60 × 45mm
2	60 × 60mm
3	60 × 70mm
4	60 × 80mm
5	60 × 90mm
6	6 × 6cm
7	4" × 5" (101.6 × 127mm)
8	Maximum size
	(142 \times 210mm or 5.5" \times 8.2")

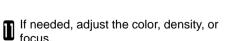
Film Projector
[Negative/Special Sizes](1-8 > #)
1:80x45mm

| Cancel |

Lift the fresnel lens, place the film inside the positioning sheet, and lower the fresnel lens. Then press the [#] key.



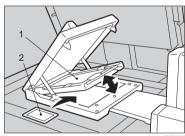
- Place the film face down.
- ☐ If the film is curled, the copy image may be out of focus. In this case, make the cut out film position sheet a little smaller than the film size and use it to hold the film down.





☐ For details, see page 171.





- 1: Fresnel lens
- 2: Film

If needed, select the copier modes.

✓ Reference

□ For details, ✓ see page 175.

Press the [Start] key.

Choose your next job.

Reference

☐ For details,

see page 176.

Adjusting Color, Density and Focus

After shading, you can adjust the color tone, image density, or manual focusing.

A)	Note

- ☐ When setting the glass mount film holder, manual focus adjustment is required.
- ☐ You can adjust the focus manually for 35 mm film only.

Color Tones in Film Scanning

Use these modes when you want to adjust the overall color tone of copies. Also use these modes when you use negative film, because the color tone of copies varies with the film brand. You can adjust the tone of copies by adjusting Cyan, Magenta, and Yellow (three basic colors).

Notes on Color Tone Adjustments

- ☐ If the color balance differs slightly from your image, you can also change the tones with the Color Balance Adjustment (◄ See page 88) function.
- ☐ If dark parts are too black, change the U.C.R. adjustment to level 3 (default = level 5). See page 91.

Density Adjustment

Density can be set not only with this display, but also with Image Density Adjustment. However, when adjusting for the projector, we recommend you adjust the image density with this display.

Adjusting the Color Tone/Brightness Using Negative Film

- When you copy negative film, adjust the color tone (density of yellow, magenta, and cyan) and brightness (quantity of light) according to the table below. However, even when you use the same type of film, you must use different settings depending on the way the original picture is taken or developed. If you cannot make copies as you want, perform adjustment.
- ☐ You can also use the "Color Balance Adjustment" function of the copier to correct slight color difference. ► See page 88.

Yellow (Y)	Lighter	\leftarrow 1 2 3 4 5 6 7 8 9	$\rightarrow \ \text{Darker}$
Magenta (M)	Lighter	\leftarrow 1 2 3 4 5 6 7 8 9	$\rightarrow \ \text{Darker}$
Cyan (C)	Lighter	\leftarrow 1 2 3 4 5 6 7 8 9	$\rightarrow \ \text{Darker}$
Density	Lighter	\leftarrow 1 2 3 4 5 6 7 8 9	$\rightarrow \ \text{Darker}$

Manufac	cturer				FUJI COLOR			Kodak					
Film typ	SUPE	RGA	CE *3	SUPER V *4	SUPER G *5	REALA ACE *6	GOLD *7		ROYAL GOLD *8		GOLD *9		
ISO sensi	tivity	100	400	800	100	200	800	100	200	400	100	400	800
	Υ	5	5	5	4	3	5	4	5	5	5	5	5
Color	М	5	5	5	5	5	6	7	7	6	7	5	6
	С	5	5	5	3	3	5	6	6	5	6	5	5
Density	*1	6	4	5	6	5	4	5	4	5	5	5	5
Density	*2	5	3	4	5	4	3	4	3	4	4	4	4

Manufacturer		Konica					AGFA		
Film type		LV	*10	COLOR JX *11			COLOR HDC *12		
ISO sen	sitivity	100	200	100	200M	400	100	200	400
	Y	3	3	4	5	5	4	6	8
Color	М	6	5	7	4	5	5	6	5
	С	5	4	5	4	3	5	5	2
Density *1		5	5	6	5	5	5	4	5
Density *2		4	4	5	4	4	4	3	4

- Density *1 should be used when film is set in the film holder.
- Density *2 should be used when film is set on the exposure glass (platen glass).

^{*3, *4, *5, *6:} These products are registered trademarks of Fuji Photo Film Co., Ltd.

^{*7, *8, *9:} These products are registered trademarks of Kodak Ltd.

^{*10, *11:} These products are registered trademarks of Konica Corporation.

^{*12:} This product is a registered trademark of Agfa Gevaert AG.

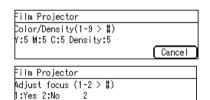
- 1 If you want to adjust the color tone or image density, select "1" with the [Number] keys, then press the [#] key.
- Film Projector
 Color/Density adjustment (1-2 > #)
 1:Yes 2:No 1
 Cancel
- Select the level (1 9) for Yellow with the [Number] key, then press the [#] key.

Film Projector	
Color/Density(1-9 > #)	
Y:5 M:5 C:5 Density:5	
	Cancel

☐ Y means Yellow, M means Magenta, and C means Cyan.

Level	Density			
1	Lighter			
1	\uparrow			
5				
\downarrow	\			
9	Darker			

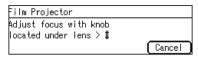
- Repeat step 2 for Magenta and Cyan.
- Select the density level, then press the [#] key.
- If your film type is 35mm and you want to adjust focus manually, select 1 with the [Number] keys, then press the [#] key.

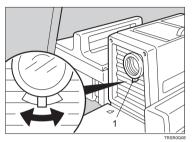


Cancel

- Place a blank piece of white paper under the mirror unit, then press the [#] key.
- Adjust the focus with the focusing lever, then press the [#] key.
- Note
- ☐ After copying, return the focusing lever to the center.







1: Focusing lever

Selecting Modes

You can select copier modes with the projector.

- ☐ Regarding the modes that cannot be selected with the projector, see page 96.
- After shading, select the modes.





- ☐ This operation is the same as that described in the "Copying" chapter.
- Press the [Start] key.

Choosing Next Job

After copying, you can select the next job:

Continue:

You can copy the same film again, or you can copy another film which is of the same type.

• Retry (Color/Density):

You can adjist the color tone, image density, or adjust the focus manually.

· Retry (Shading):

If the mirror unit is moved, or if some lines appear on the copy, you can perform shading again.

· Select film type:

You can change the type of film.

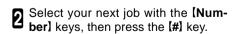
• End job:

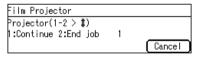
You can finish using the projector, see page 177.

Make sure that the "1" is selected, then press the [#] key.



If you want to finish using the projector, select "2" with the [Number] keys, then press the [#] key.

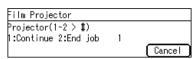


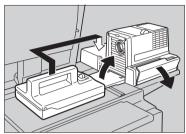


```
Film Projector
(1-3 > #) 1: Continue
2:Retry 3:Select film type 1
```

Exiting Projector Mode

- Select "2" with the [Number] keys, then press the [#] key.
- Replace the mirror unit to its original position.
- Note
- □ Be careful not to touch the fresnel lens. If you do touch it, clean it. - See page 180.
- Return the holders, filters, and other accessories to the accessory box.
- Close the lens cover.
- Turn off the power switch.
- Note
- ☐ Though the power switch is turned off, the cooling fan may be still working. Therefore, please wait a few moments before unplugging the power cord.

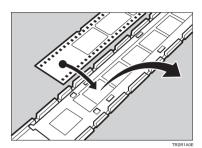




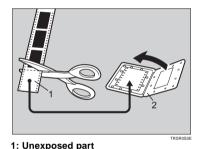
What to do if Something Goes Wrong

1. If the color balance is not right

- ☐ If the color density leans to red or blue, or isn't properly balanced, perform the color density adjustment, and the color balance adjustments for Yellow, Magenta, and Cyan. See page 88.
- If the film you want to copy does not match the types of base film included.
- If you do not plan on copying from this type of film often, use an unexposed frame of the same film strip, if available, when performing shading.



If you plan on copying from this type of film often, make a base slide using an unexposed, developed frame of the film.



- If you have no blank unexposed frame of the same type of film, you can use an unexposed frame from film pro
 - an unexposed frame from film produced by the same company, but the colors might differ a bit.
- 3. If the copy image is out of focus.
- Check if the image on the film is focused or not. If it is, make sure the film is correctly set in the holder.
- If you reset the film correctly in the holder and the image is still out of focus, or if you use a different image, and the copy image is out of focus in every case, please call your service representative.
- ☐ You can adjust the focus manually with the focusing lever. ◆ See page 171.
- 4. If the edge of the original image does not appear on the copy.
- $\hfill\Box$ Check the size of the area that can be copied. $\hfill \Longrightarrow$ See page 150.
- ☐ When setting film in the holder, be sure to position the desired frame properly.

□	To extend the area that can be copied, use the glass mount film holder and focus manually.
5.	If the projection lamp does not light.
	If the projection lamp does not light and a service message appears on the screen, the lamp might be burned out. In this case, please call you service representative.
6.	If you move the mirror unit.
	Perform the shading operation once again.
7.	If lines appear on the copy.
	Perform the shading operation again.
	Some possible causes are:
	1. A long time has passed since shading.
	2. Many copies were made since shading and the mirror unit has moved due to copier operation.
	3. Someone might have leaned on the machine or put something on it.
	If copying from negative film, thin black lines might-appear on the lighter part of the copy, even after shading.
8.	Black lines appear on the edge.
	These lines are shadows caused by the film holder and cannot be eliminated.
9.	If a ring pattern appears on the copy.
□	The ring pattern is present on the film itself, and the machine is sensitive enough to pick it up. Try to change the film setting direction. Adjusting the focusing lever so that the image is slightly out of focus will eliminate most of the pattern.
	Also, try the following:

- Open and close the film cover.
- Slide the film in the holder a bit.
- Turn the film around in the holder. (Do not flip it over.)

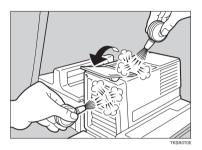
Daily Maintenance

Exterior

Wipe with a dry soft cloth.

Lens

Blow off any dust using the blower brush. If there are fingerprints on the lens, wipe them with a soft cloth.

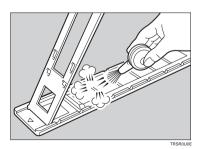


Film Holder

Blow off any dust using the blower brush. If there are fingerprints on the glass, wipe with a soft cloth.

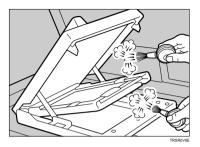
Holder Slot

Blow off any dust using the blower brush.



Mirror Unit

Blow off any dust using the blower brush. If there are fingerprints on the glass, wipe with a soft cloth.



Specifications

Mainframe

Configuration: Desktop

Process: Dry electrostatic transfer system

Resolution: 400 dpi

Gradations: 256 gradations

Originals: Sheet, book, objects

Original size: Maximum: A3, $11" \times 17"$

Copy paper size: Trays: A3, B4, A4, B5, B5, A5, 11" × 17",

 $81/2" \times 14" \square$, $81/2" \times 13" \square$, $81/2" \times 11" \square$,

 $51/2" \times 81/2"$

Bypass tray: ◆See page 36.

Copy paper weight: Trays: 64 - 105g/m², 17 - 28 lb

Bypass tray (Simplex): 52 - 160g/m², 14 - 43 lb Bypass tray (Duplex): 64 - 160g/m², 17 - 43 lb

(When you use paper heavier than 104.7g/m², 28 lb, use the

bypass tray and select Thick Paper mode.)

Copy paper capacity: Tray: 500 sheets

Bypass tray: 50 sheets

Copying speed

(Full size): Full color (4 colors):

	Standard mode	OHP/Thick paper mode
A4_, 81/2" × 11"_	6 copies/minute	3 copies/minute
A3□, 11" × 17"□	3 copies/minute	1.5 copies/minute

Black, Yellow, Magenta, Cyan:

	Standard mode	OHP/Thick paper mode
A4_, 81/2" × 11"_	21 copies/minute	5 copies/minute
A3□, 11" × 17"□	11 copies/minute	2.5 copies/minute

Blue (Magenta + Cyan), Green (Yellow + Cyan):

	Standard mode	OHP/Thick paper mode
A4_, 81/2" × 11"_	9 copies/minute	4 copies/minute
A3□, 11" × 17"□	4.5 copies/minute	2 copies/minute

Red (Yellow + Magenta):

	Standard mode	OHP/Thick paper mode
A4_, 81/2" × 11"_,	7 copies/minute	3.5 copies/minute
A3□, 11" × 17"□	3.5 copies/minute	1.5 copies/minute

Black + Yellow, Black + Magenta, Black + Cyan:

	Standard mode	OHP/Thick paper mode
A4_, 81/2" × 11"_	7 copies/minute	3.5 copies/minute
A3□, 11" × 17"□	3.5 copies/minute	1.5 copies/minute

First copy time:

	Standard mode	OHP/Thick paper mode
Full colors (4 colors)	22 seconds or less	35 seconds or less
Black, Yellow, Magenta, Cyan	8 seconds or less	23 seconds or less
Blue (Magenta + Cyan)	16 seconds or less	27 seconds or less
Green (Yellow + Cyan)		
Red (Yollow + Magenta)	16 seconds or less	27 seconds or less
Black + Yellow	16 seconds or less	27 seconds or less
Black + Magenta		
Black + Cyan		

(A4 \square , 81/2" \times 11" \square , when setting an original on the exposure glass and full size copying)

Non-reproduction area: Leading edge: 5±2mm, 0.2" ±0.08"

Trailing edge: 2+2/-1.5mm, 0.08"+0.08"/-0.06"

Side: 2±2mm, 0.08" ±0.08"

(Total 4mm, 0.16" or less)

Toner replenishment: Cartridge (220g/cartridge)

Warm-up time: About 7 minutes (20°C, 68°F)

Reproduction ratios: 5 enlargement and 7 reduction

	Metric version	Inch version
Enlargement	400%	400%
	200%	200%
	141%	155%
	122%	129%
	115%	121%
Full size	100%	100%
	93%	93%
	82%	85%
.	75%	78%
Reduction	71%	73%
	65%	65%
	50%	50%
	25%	25%

Power consumption:

	Copier only	Full system*
Warm up	1.3kW	1.3kW
Stand-by	0.4kW	0.4kW
Copying	1.1kW	1.1kW
Maximum	less than 1.5kW	less than 1.5kW

^{*} Full system: Mainframe with the document feeder, 20-bin sorter stapler and 1500-sheet tray unit.

Noise Emission:

Sound pressure level (The measurements are made according to ISO 7779 at the operator position.)

	Copier only
Stand-by	less than 38.5dB (A)
Copying	less than 55dB (A)

Sound power level

(The measurements are made according to ISO 7779.)

	Copier only
Stand-by	less than 55dB (A)
Copying	less than 69dB (A)

Dimensions (WXDXH up to the exposure glass):

620 X 680 X 602mm, 24.5" X 26.8" X 23.8"

Weight: Approx. 105kg, 231.5 lb

Document Feeder (Option)

Original Feed: Automatic reverse document feed - ARDF mode

Automatic document feed - ADF mode

Semi-automatic document feed - SADF mode

Original size: A3 \square - B6 \bigcap (B6 \bigcap cannot be used in ARDF mode)

11" X 17" □ - 51/2" X 81/2" □ □

Original weight: SADF mode, ADF mode: 40 - 128g/m², 11 - 34 lb

ARDF mode: 52 - 105g/m², 14 - 28 lb

(For 40 - 52g/m², 11 - 14 lb originals, use Thin Paper mode.)

Maximum number of

originals to be set: 50 sheets (80g/m², 20 lb)

Original set: Face up, First sheet on top

Original transport: One flat belt

Maximum power

consumption: 45W (Power is supplied from the main frame.)

Weight: Less than 10.5kg, 23.2 lb

Dimensions: 610 X 507 X 130mm, 24.1" X 20.0" X 5.2"

 $(W \times D \times H)$

20-bin Sorter Stapler (Option)

Number of bins: 20 bins + proof tray

Paper size for bins

(Normal paper mode): Sort/Stack:

A3, B4, A4, B5, 11" × 17", 10" × 14, 81/2" × 14", 81/2" × 13", 81/2" × 13", 81/2" × 13", 81/2" × 11", 12" × 18",

Staple:

A3□, B4□, A4□□, B5□□, 11" × 17"□, 10" × 14"□, 81/2" ×

 $14" \Box$, $81/2" \times 13" \Box$, $81/4" \times 13" \Box$, $81/2" \times 11" \Box$

Paper weight for bins: 52g/m² - 157g/m², 14 - 42 lb

Bin capacity

(Normal paper mode): Sort: A4, $81/2" \times 11"$ or smaller: 30 copies ($80g/m^2$, 20 lb)

B4, 81/2" × 13" or larger: 25 copies (80g/m², 20 lb)

Stack: A4, $81/2" \times 11"$ or smaller: 25 copies ($80g/m^2$, 20 lb)

B4, $81/2" \times 13"$ or larger: 20 copies ($80g/m^2$, 20 lb)

Stapler capacity

(Normal paper mode): 30 sheets (80g/m², 20 lb)

Proof tray capacity: 100 sheets (80g/m², 20 lb)

Maximum power

consumption: 35W (Power is supplied from the main frame.)

Weight: 20.5kg, 45.2 lb

Dimensions: 430 X 570 X 680mm, 17.0" X 22.5" X 26.8"

 $(W \times D \times H)$

10-bin Sorter Stapler (Option)

Number of bins: 10 bins + proof tray

Paper size for bins: Sort/Stack:

A3 \square , B4 \square , A4 \square \square , B5 \square \square , 11" \times 17" \square , 10" \times 14 \square ", 81/2" \times

 $14" \Box$, $81/2" \times 13" \Box$, $81/4" \times 13" \Box$, $81/2" \times 11" \Box$

Staple:

A3□, B4□, A4□□, B5□□, 11" × 17"□, 10" × 14□", 81/2" ×

 $14" \Box$, $81/2" \times 13" \Box$, $81/4" \times 13" \Box$, $81/2" \times 11" \Box$

Paper weight for bins: 52g/m² - 157g/m², 14 - 42 lb

Bin capacity: Sort: A4, 81/2" × 11" or smaller: 30 copies ($80g/m^2$, 20 lb)

B4, $81/2" \times 13"$ or larger: 25 copies ($80g/m^2$, 20 lb)

Stack: A4, 81/2" \times 11" or smaller: 25 copies ($80g/m^2$, 20 lb)

B4, 81/2" × 13" or larger: 20 copies ($80g/m^2$, 20 lb)

Stapler capacity: 20 sheets (80g/m², 20 lb)

Proof tray capacity: 100 sheets (80g/m², 20 lb)

Maximum power

consumption: 33W (Power is supplied from the main frame.)

Weight: 12.4kg, 27.4 lb

Dimensions: 381 X 548 X 443mm, 15.0" X 21.6" X 17.5"

 $(W \times D \times H)$

3-bin Sorter (Option)

Number of bins: 3 bins

Paper size for bins: A3 \square , B4 \square , A4 \square \square , B5 \square \square , A5 \square \square , B6 \square , A6 \square , 11" \times

 $17"\Box$, $10" \times 14\Box$ ", $81/2" \times 14"\Box$, $81/2" \times 13"\Box$, $81/4" \times 13"\Box$,

 $81/2" \times 11" \square$, $51/2" \times 81/2" \square$, $12" \times 18" \square$

Paper weight for bins: Face-up: 1st bin: 52 - 160g/m², 14 - 42 lb

2nd and 3rd bins: 52 - 105g/m², 14 - 28 lb

Face-down: 64 - 105g/m², 17 - 28 lb

Bin capacity

(Normal paper mode): 1^{st} bin: A4, $81/2" \times 11"$ or smaller: 500 sheets ($80g/m^2$, 20 lb)

B4, $81/2" \times 13"$ or larger: 250 sheets ($80g/m^2$, 20 lb)

2nd and 3rd bins:

A4, $81/2" \times 11"$ or smaller: 250 sheets ($80g/m^2$, 20 lb)

B4, $81/2" \times 13"$ or larger: 125 sheets ($80g/m^2$, 20 lb)

Maximum power

consumption: 30W (Power is supplied from the main frame.)

Weight: Less than 14kg, 30.9 lb

Dimensions: 361 X 483 X 427mm, 14.3" X 19.1" X 16.9"

 $(W \times D \times H)$

1000-sheet Tray Unit (Option)

Copy paper weight: 64 - 105g/m², 17 - 28 lb

Available paper size: A3 \square , B4 \square , A4 \square \square , B5 \square \square , A5 \square , 11" \times 17" \square , 81/2" \times 14" \square ,

 $81/2" \times 11" \square$, $51/2" \times 81/2" \square$

Maximum power

consumption: 50W (Power is supplied from the main frame.)

Paper capacity: 500 sheets \times 2 trays

Dimensions: 620 X 680 X 390mm, 24.5" X 26.8" X 15.4"

 $(W \times D \times H)$

Weight: Approx. 32kg, 70.6 lb

☐ Specifications are subject to change without notice.

1500-sheet Tray Unit (Option)

Copy paper weight: 64 - 105g/m², 17 - 28 lb

Available paper size: A3□, B4□, A4□□, B5□□, A5□, 11" × 17"□, 81/2" × 14"□,

 $81/2" \times 11"$, $51/2" \times 81/2"$

Maximum power

consumption: 50W (Power is supplied from the main frame.)

Paper capacity: 500 sheets \times 3 trays

Dimensions: 620 X 680 X 390mm, 24.5" X 26.8" X 15.4"

 $(W \times D \times H)$

Weight: Approx. 37kg, 81.6 lb

Projector Unit (Option)

Acceptable film types: Type: Positive film, Negative film

Size: 35mm

Others: 60 X 45mm, 60 X 60mm, 60 X 70mm,

60 X 80mm, 60 X 90mm, 4" X 5"

Max: 142 X 210mm, 5.5" X 8.2"

Mount: Yes (Up to 5 frames can be set in a film holder.)

Strip: Yes (A series of 6 frames can be set in a film holder.)

Focusing: Fixed/Manual

Maximum power

consumption: 70W

Weight: Projector: Approx. 7.9kg, 17.5 lb

Mirror unit: Approx. 2.7kg, 6.0 lb

Dimensions: Projector: 300 X 442 X 212mm, 11.9" X 17.5" X 8.4"

 $(W \times D \times H)$

Mirror unit: 298 X 232 X 50mm, 11.8" X 9.2" X 2.0"

Remarks: The holder is required for installation.

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